AN EXPLORATORY STUDY OF FACTORS IN THE RELOCATION OF THE RETIRED

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ABSTRACT

The primary aim of the research was to investigate a variety of factors involved in the relocation of retired individuals. A secondary aim was to assess whether or not relocation was a stressful process and, depending on the outcome, to study the role of social support in mediating the effects. In order to do this a questionnaire was administered, in the form of a personal interview, to sixty-one men and seventeen women, all of whom were retired owner occupiers residing in Nelson City. Data were gathered from the 42 relocatees in the sample to investigate the pre-move physical situation, the post-move physical situation, decision-making, and perceptions of the current situation. Data pertaining to respondent characteristics, retirement situation, retirement decision, health situation, life events and social support were obtained from the total sample. Frequency tables and cross-tabulations were used to present the information acquired about these factors.

Chi-square, Mann-Whitney U and Kolmogorov-Smirnov analyses yielded no significant differences between the relocated and non-relocated subsamples on any of the key variables. Chi-square analyses comparing a social support scale and a stress symptoms scale in turn with marital status, feeling healthy enough to do as one wishes, and some major life event classes did yield some significant results. It was concluded that no differences of any significance existed between the relocated and non-relocated groups on the key variables measured. A similar study conducted in another setting, however, may yield different results.

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CHAPTER 1

INTRODUCTION

The emergence and recognition of retirement as an entity distinct from aging is comparatively recent. It is very much a twentieth century, industrialised nation phenomenon; in part, largely determined by Government socio-economic policies and organisational dictates.

Current trends in population indicate that between 1981 and 2001 the population, in this country, aged 60 years and over will increase by some thirty-three per cent. Compare this with a projected growth rate of the total population at a much lower thirteen to twenty-two per cent. Concomitant with this shift in age structure will be an increased demand for services and facilities. Associated with these shifts in the composition of the population are changes in its distribution. With a proportionately larger aging population projected for the future, retirement migration is likely to assume a relatively greater importance than it has at present.

The study of retirement migration is highly interdisciplinary. The diverse fields of demography, economics, sociology, psychology, and gerontology have all contributed to research in this area.

The present study looks at mobility from a relocation perspective. The behavioural, psychological and socio-economic factors mediating relocation behaviour and the outcomes of moving on health and well-being have come under the scrutiny of a number of researchers. A preoccupation, however, with institution based or retirement community based relocation raises doubts about the relevance of such studies to integrated community relocation. This issue is particularly important with respect to New Zealand as it is estimated that greater than ninety per cent of people

aged over sixty live in ordinary residences. The "retirement-community" concept has only recently surfaced as a viable and acceptable alternative; most of our older population are living in houses or flats.

The decision to look at age integrated home to home moves of the retired was prompted by the paucity of information available on the determinants and consequences of relocation within this group. The primary aim of this research was to obtain a general picture of the relocation experience of the owner-occupier retired. Further, several variables were chosen to investigate whether moving produced any differences between relocatees and non-relocatees with respect to health.

Literature pertinent to the major concepts under investigation is presented in Chapter 2. The introductory section outlines some of the major characteristics of research in the relocation area and attempts to define the principal factors involved. An overview of relocation and life events research is presented in sections 2 and 3. Section 4 concentrates on defining and outlining the context of social support from the viewpoint of its intended use in this project. The factors are integrated in section 5, and, on the basis of that, the rationale for the study is presented.

Chapter 3 outlines the method and contains four sections: the sample; the instrument; pilot-testing; and the main procedure.

The results of the statistical analyses are presented in three parts in Chapter 4. Section 2 gives the findings on a number of demographic variables, section 3 contains data relating the stress indicator items with a number of key variables, and the relocation subsample is dealt with in section 4. The results of a follow-up are referred to briefly in section 5 of the chapter.

Chapter 5 discusses the results in relation to findings reported in the literature, and outlines the limitations and methodological problems of the present study. Suggestions are made as to the possible

areas of future research. A final summing up of the project is presented in the conclusions, Chapter 6.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The literature available on the relocation of the retired population is heavily biased towards American studies, particularly those concerned with communities designed specifically for retirees. The terms "retired", "aged", "elderly", and "older" are popular descriptions for individuals on the other side of working life. Little regard is given, however, to the differences that may exist between these groups and what is meant when one speaks of them. Such ambiguities make it difficult to isolate research that is appropriate reference material for a study of the retired who have relocated within, or to, New Zealand.

Relocation for the "older" person is most likely to be in one of four directions; from one community to another, from a community to an institution, from one institution to another, or from an institution back into the community (Hasselkus, 1978). There is a considerable amount of literature on institution related moves and numerous studies on community-based age segregated relocation (e.g. retirement buildings or condominiums). Few studies exist that examine the movement of retirees within the community at large (Ferraro, 1982).

One obvious reason for the scarcity of research in this area is the difficulty associated with locating a sample. Institutions and retirement communities are readily identifiable, and movements in and out are easily monitored. It is possible that the planned nature of these types of facilities tend to attract public attention, and, as a

consequence, research. It is a challenge to try and locate movers within the community at large.

Another factor contributing to the problem identifying relevant material is the terminology used to describe "older" people. It is not intended that this discussion dwell heavily on defining "retired", but the variety of descriptions associated with the post-work years, and their use in the relocation literature requires some comment. Individuals are, it would appear, indiscriminately labelled as "retired", or "aged", or "elderly". Institutions and retirement communities tend to select according to a set of criteria. These do not necessarily differentiate between people who perceive themselves as retired, and others who perceive themselves as something different (e.g. widowed).

The impression this researcher wishes to convey suggests that a "retired" individual is, in some way, "different" from someone who is "elderly". Mitchell (in Carp, 1977) referred to retirement as covering a variable period of time. The beginning and end of retirement is often indeterminate, although the start is typically taken as the final day of work. Mitchell contends that retirement is a combination of psychological, economic and social factors, all interacting to create a certain lifestyle. The trend for people to retire at younger ages no longer makes it appropriate to equate retirement with the aged or elderly.

The relocation literature is discussed in section 2.2. Much of the material cited in this review was derived from studies of people who moved to "protected" environments, and as such the findings should be treated with caution. Although relocation is the major focus of this project and, as such, has received the greatest amount of attention in the following review of the literature, reference has also been made to two other areas, or concepts, of research which either contain a relocation component or discuss relocation in relation to other processes.

The first of these are life events schedules. The notion that exposure to, or experiencing of, a cluster of life events is somehow implicated in the onset of disease has been around for some time (Meyer, in Holmes and Rahe, 1967), but for many years research into this concept remained dormant. In 1967 Holmes and Rahe rekindled interest with the publication of their Social Readjustment Rating Scale. They argued that the stressfulness of particular life events could be successfully measured quantitatively by the assignment of scores indicating the amount of adjustment the average individual would be required to make upon experiencing an event. Their original list contained 43 items, and covered events relating to health, financial matters, family, employment, social relationships and relocation. The schedule has generated a great deal of discussion and criticism, particularly with respect to assumptions made concerning the impact of life events, and the use of normative weights.

Within the context of the present project a life events schedule was included to investigate the types of events experienced by people in their later years. The list used in this study comprises only a small part of the total interview schedule (Appendix 2.4). The decision to use a form in this manner was made only after reading a considerable amount of literature on life events. On the basis of the amount of time spent deliberating the issues of life events research, and contemplating the value of using schedules in conjunction with other methods, life events research is discussed in greater depth than the inclusion of such a scale would usually warrant. Section 2.3 outlines the development of life events research, presents a critical review of the Holmes and Rahe (1967) schedule, and discusses two major issues, content and scoring, of the life events scales.

The second area which receives attention in this review is social support; how it is both affected by and influences the consequences of

relocation. Numerous researchers have advocated the value of social support as a mediator, or "buffer", of stress (e.g. Minkler, 1981; Mueller, 1980; Eckenrode and Gore, 1981).

Research into social support, and the closely related field of social network analysis has been conducted for a number of years, with the structural and functional properties receiving considerable interest. A number of theories and models describing the process of social support have been proposed. The formulation of reliable measurement techniques, and their validation, have lagged somewhat behind the theoretical research, but there have been developments in this area since the early 1980's.

A social support measure is included in this project to obtain a picture, however crude, of its relationship to factors such as life events, physical symptomatology and relocation status. It is hoped that a greater understanding and a better explanation of the effects of relocation can be achieved by including both a measure of social support and a life events schedule together in the same survey. A review of social support literature is covered in section 2.4, and section 2.5 describes in more detail the rationale for integrating relocation, life events and social support.

2.2 RELOCATION

The following review of the research literature on relocation aims to identify the major factors and concepts mediating the relocation process, and the effects on health and life satisfaction outcomes. The research literature on the situational and environmental reasons involved in the decision to move, and, to a lesser extent, the effects of individual characteristics on moving are discussed.

Stokols and Shumaker (1982), following a critical review of research literature on the detrimental effects of mobility on health,

suggested that more recent demographic data challenged the earlier evidence and that relocation, for the majority of people (Americans), occurred without detrimental health consequences. They argued that previous research had conceptualised relocation as a discrete event, ignoring its dynamic qualities and the broader long-term effects of environmental change, and differences in the non-residential areas of activity. Criticism was made concerning the failure of earlier works to consider the spatial and temporal components of moving, or to adequately analyse any resultant health consequences. Stokols and Shumaker assumed that the relationship between mobility and health was dependent on a combination of factors; the individuals previous relocation behaviour, their current life situation, and the circumstances surrounding a move. Central to their analysis was the concept of "person-environment congruence". This can be described as the extent to which one believes that features of the current environment are capable of accommodating the goals and activities that are important to the individual. Associated with person-environment congruence are the concepts of "place-dependence" (the strength of an individual's subjective attachment to specific places) and "place specificity" (the association between a person's activities and specific locations). Nine hypotheses pertaining to previous, current, and anticipated residential periods, and their influences on adjustment to relocation, were proposed. A survey used to assess the hypotheses produced, on the whole, data in support of them. A brief summary of the major findings indicated:

(i) Person-environment congruence could be measured in terms of the diverse personal needs and environment conditions associated with major life domains, and it was useful to do so.

(ii) The temporal context of relocation played a crucial role in mediating the individual's well-being during the period following the most recent move.

(iii) Remaining in a low-quality residential situation due to a deficit of better alternatives was associated with increased illness.

(iv) Perceptions of residential choice and congruence modified the connection between length of residence and health; those who had little choice in moving, or who evaluated their current situation negatively reported greater health impairment.

(v) Within residential and non-residential domains the effects of congruence on health was additive.

(vi) A high mobility rate was directly associated with increased illness symptoms.

Stated in simpler terms; "...staying in a place that does not adequately meet one's needs, for lack of better options, may promote negative health consequences. By contrast, remaining in a residence that is highly congruent with one's needs will be associated with better health" (Stokols and Shumaker, p.167).

The results of an extensive study conducted by Schooler (in Eisdorfer and Wilkie, 1977) echoed findings similar to those of Stokols and Shumaker (1978). He suggested that the outcomes of "normal" moves were complex, not always yielding consistent results. The anticipation of a move was associated with a mixed pattern of change in morale and health, with findings weighted in favour of a general health decline. For some, a favourable perception of environmental change was associated with an improvement in a number of morale measures, whereas for others, the anticipation of a move in connection with its eventual occurrence was strongly associated with a decline in morale. People who experienced a decline in the quality of the new environment were the most likely to report a decline in both morale and health. The influence of social relationships, as a mediator, affected the relationship between mobility and environmental change, and morale.

A theme similar to that studied by Stokols and Shumaker (1978)

was investigated by Goldscheider (1966). The results of his research, on the differential residential mobility of older people, suggested that the major cause for planning or wanting to move was associated with dissatisfaction in current housing. There were two comparison groups; non-older (19-49 years) and older (50 years plus). The age of fifty years was arbitrarily chosen as the cut-off because...

> "...it seemed to represent the starting point for critical changes occurring in the life-cycle - sociological, psychological and physiological" (p.104).

The author did suggest that within the older group, the 50-64 year olds were more mobility prone in terms of their attitudes and behaviour. The differences that occurred were possibly a reflection of moves associated with occupation, changes due to retirement, and the current stage of the family lifecycle. It is arguable whether 50 years of age was an appropriate cut-off point. The possibility of greater amounts of variation occurring within the groups is quite high; intra-group comparisons within the older group confirmed this. At the expense of obtaining a significant comparison between an "older" and a "non-older" group, information on more subtle differences was lost.

Two more factors involved as mediators in the relocation-health relationship are control and predictability. Schulz and Brennar (1977) discussed the effects of these two variables on the outcomes of moving from one residential setting to another. Using the dimensions of degree of choice and degree of environmental change, they developed a model predicting a range of effects for different combinations of home/institution relocation. Individuals moving involuntarily from a home to an institution would show the greatest negative effects. Voluntary home-to-home relocation, it was proposed, would have the smallest number of negative outcomes. Three hypotheses were associated with the model; the greater the amount of choice, the less negative the effects of relocation; the more predictable a new environment, the less negative

the effects of relocation; and, past experiences in similar situations and personality will influence the individuals response to the new environment. A number of home-to-home investigations were cited. Only two studies were related to involuntary relocation; one the result of highway development, the other not specified. The remainder involved voluntary relocation (e.g. Lawton and Yaffe, 1970; Wittels and Botwinick, 1974). Typically, for voluntary relocation, relocatees were compared with non-relocating controls. The majority of relocation was to new apartment-type retirement projects. Outcomes measured included morale, satisfaction, functional health, and mortality. In all the cases cited, results indicated either no difference between controls and relocatees, or outcomes of greater satisfaction and higher morale in favour of the relocated groups. Comparison of these results with those of involuntary moves, in which the non-relocated controls scored higher on life satisfaction and adjustment measures, illustrated that choice was an important determinant of relocation outcomes. While not disputing the significance of choice, the beneficial consequences of relocation for voluntary relocatees are undeniably influenced by other factors. The favourable outcomes may also have been partly attributable to improvements in the accommodation and surroundings. The selection criteria applied to applicants accepted into senior housing projects may have discriminated in favour of those people judged to be, for arguments sake, physically and mentally healthier, better off financially, happier and more satisfied. Another relevant point relates to a problem common in this type of research, and one referred to by Schulz and Brenner; the absence of randomly assigned subjects. They questioned whether the relocation groups, because of their desire to move, were different from the controls. Taking their argument further, it should be recognised that the relocated sample had not only desired to move, but had realised that desire. The controls,

who had not moved, may have contained people who had wished to move but for whom that wish had not been realised.

The voluntary-involuntary dimension is almost inextricably interwoven with control and predictability. Many researchers have used this dimension as a dependent variable in the measurement of outcomes associated with relocation (Lawton and Yaffe, 1970; Ferraro, 1973; Wittels and Botwinick, 1974). People who choose to move, it is widely contended, fare better on health and satisfaction ratings than those who are forced to move. This voluntary-involuntary aspect of a move has been an important focus in previous research. More recent literature however, while incorporating this dimension, has concentrated on the effects of other mediating factors on outcomes. In addition to those mentioned above, socio-economic factors (Goldscheider, 1966), housing consumption patterns (Struyk, 1980) and previous relocation behaviour (Schulz and Brenner, 1977; Stokols and Shumaker, 1982) have all been found to influence the relocation-health association.

The situational and physical factors present in the old environment or offered in a new one are the features of relocation possibly most salient to the majority of individuals contemplating a move. Few people would conceptualise their moves or behaviour in terms of "congruence" or "controllability", rather they would be looking at things from the point of view of a quieter pace of life, or of finding a residence more suitable for their current needs. A study conducted among retired people in Waikanae, where 20% of the population is over 65, (Age Concern, 1978) reported that the factors most important in choosing a place were the climate, flat streets, a quiet pace of life, gardening opportunities, and fresh air. In a study reporting similar results, the findings of several years of research on the retirement migration, in Britain, to seaside areas indicated that the better climate, cleaner air, the sea and better health were the most prominent

reasons for moving. Contrary to previous literature about seaside relocation, most people reported they were happy in their new environment (Karn, in Age Concern, 1978). No mention was made in either study of problems associated with moving. Longford (in Atchley, 1976) found climate to be one of the least important criteria influencing a move. More important were factors such as the desire to find something more suitable for current needs, cheaper housing, the desire to get away from a deteriorating neighbourhood, and the desire to move closer to friends or family. The results of a study by Goldscheider (1966) suggested that dissatisfaction with current housing and/or the neighbourhood was the major cause for planning or wanting to move; family and health-related reasons were, apparently, not significant. Subjects could, in retrospect, rationalise the reasons for moves made in the past, but were unable to clearly conceptualise why they should wish to move at some point in the future.

Some research findings have isolated differences, within the retired population, between the personal characteristics of movers and non-movers. Eisdorfer and Wilkie (1977) reported that, as a class, older people moved far less frequently than younger adults. The older movers tended to be separated or divorced, on a low income, less well educated, renting, in better health, and, historically, more mobile at an earlier age. Atchley (1976), expanding on the education factor, reported that the more highly educated retiree tended to move longer distances in relation to those with little education, who moved over shorter distances.

Up to this point, the criticisms made have been directed at specific studies. To follow are observations and general criticisms, all of which are applicable to one or more of the studies mentioned above. Much of the research literature cited in this review has examined relocation, in terms of some specific mediating variable

or variables, and its relationships with a variety of outcomes. The measures used to assess the effects of relocation, made at both objective and subjective levels, have included morale, satisfaction, depression, anxiety, physical symptoms, mortality, daily functioning, days spent in bed, and social contacts (Lawton and Yaffe, 1970; Hasselkos, 1978; Ferraro, 1983). The question must be asked; how effective or appropriate are these measures for determining the presence, the nature, or the intensity of stress? A characteristic of many studies is the reliance on one type or class of measures to assess the effects of relocation stress. Are days spent in bed, for example, a direct measure of illness, or a measure of an individual's reaction to illness, and how does this relate to morale or levels of satisfaction? The multitude of measures and their possible combinations clearly complicate these issues.

The predominance of studies focusing on relocation to "retirement communities" highlighted an aspect of the existing research that limits the application of findings to true "home to home" relocation. The need to differentiate between types of "home" environments has been addressed by Ferraro (1983). He observed that most researchers failed to differentiate between age-integrated (age-heterogeneous) and age-segregated (age-homogeneous, e.g. senior housing projects or retirement communities) settings. He suggested that inconsistencies in research findings on relocation between the age-integrated and age-segregated environments may have been due to variations in their age distributions. This researcher feels that he does not take his argument far enough. The services and protection offered by age-segregated environments, and the structures established for the development of social networks with people of a similar age group and needs (by virtue of the original reasons for their existence), automatically act as discriminants to circumstances consistent with age-integrated environments. The type of

person who chooses to live in an age-integrated setting may be sufficiently different to the person who desires the features offered by a retirement community or senior housing project. This difference has, for the most part, been ignored.

Although the bulk of research appears to concentrate on relocation to age-segregated settings (e.g. Lawton and Yaffe, 1970; Wittels and Botwinick, 1974; Beaver, 1979), none of the studies quoted provided any indication of the relative proportions of community-integrated to community-segregated dwellers. A breakdown of the percentages involved would have assisted in placing the results in a more meaningful context. Notwithstanding the emphasis on age-segregated studies, there are definite advantages in being able to study relocation within the boundaries of a retirement community. The subjects are conveniently contained within a small area. The environment is "standardised" as it were, which controls for variations in residential settings. Studies organised to coincide with the opening of a new community go some way toward controlling for the influences of environmental, social and political events (e.g. changes in Social Security payments) that may affect a sample containing people who moved at different points in time. The isolation of people within the integrated community who all move at much the same time would be an almost impossible task. This method of "self-selection" overrides the need to control for differences in the backgrounds of the sample. This issue is further confused by the religious, or otherwise, affiliations of various retirement communities (i.e. Wittels and Botwinick, 1974). As a result, the population to which results can be generalised becomes continually narrower.

One of the aims of most retirement communities is to provide, within easy reach, a range of services that people require more of as they grow older. Retirees moving within the wider community not only have to cope with the relocation, but also have to establish the where-

abouts of facilities and actively work to establish new relationships. Literature on this, one assumes, large portion of the population is scarce. Two researchers have however gone some way to improving this situation. Stroyk (1980) and Ferraro (1982) made use of longitudinal data collected from the Survey of the Low-Income Aged and Disabled (SLIAD). This reflects a departure from the prevailing situation, not only because it looks at the wider community, but also, because of the group interviewed initially, more than 200 had moved by the time of the second interview, thus providing a good base for the comparison of factors related to moving. The major drawback of the sample relates to their composition; low-income and disabled. This is a limiting factor in the generalisability of results. A review of the relocation literature reveals a wealth of studies on institutional and retirement community type moves. The vast majority of the retired population[1] have been ignored by most researchers. The numerous methodological problems associated with a significant number of the investigations may in part account for the range of findings on the effects of relocation. These included overall negative effects, no effect, and overall positive effects, arising from a change in residence. The outcomes of moves assessed on a voluntary-involuntary dimension were the only ones which received an almost unanimous consensus of opinion - involuntary moves were associated with the most negative effects.

The variety of outcomes employed to assess the effects of relocation, the sampling techniques and neglecting to differentiate between age-homogeneous and age-heterogeneous settings reduced the generalisability and comparison opportunities of too many studies.

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1. Estimated to be over 95% for people aged over 65 in America (Minkler, 1981), and estimated to be over 90% for people aged over 60 in New Zealand (Social Advisory Council, 1984).

On the more positive side, the identification of factors believed to mediate or influence relocation behaviour and outcomes has been a significant step towardsunderstanding of the relocation process.

2.3 LIFE EVENTS RESEARCH

The perception of relocation as a major event requiring adjustment or causing stress or distress has contributed to its inclusion in life event inventories. A 36 item life event schedule was included in the general section of the questionnaire used in this research project. The primary aim of the device was, simply, to determine the incidence and frequency of events experienced by the sample in the 12 months preceding the interview. Although the schedule was not used in the manner for which it was originally intended, it is still pertinent, in view of the wealth of research generated in this area, to outline the initial aims of life events research and some of the major issues associated with life event scales.

Historically, the concept of life events and illness goes back to the area of Adolph Meyer and the field of Psychobiology. He used life charts to illustrate the biological, psychological and sociological interrelationships of individuals to health and disease. Since the late 1940's, the life charts of over five thousand patients were used to study the nature and number of life events empirically seen to cluster at the time of illness onset. It was this observed association that stimulated the development of an instrument, the Schedule of Recent Experience (SRE), capable of assessing the frequency of occurrence of life events (Holmes and Rahe, 1967). A short time later Holmes and Rahe (1967) produced the Social Readjustment Rating Scale, a scale designed to measure the expected amount of adjustment required by an event. Not only have the Scales' development generated a great deal of research and criticism, they have been instrumental in rekindling

interest in epidemiological investigations (Mechanic, 1975).

The fundamental assumption of early life events research was the existence of a temporal association between illness onset and recent increases in the number of life events experienced that required socially adaptive responses. The impact of events was presumed to be additive; the more events, the greater the expected effect. It was assumed that the incidence of events influenced the timing, but not the type, of illness episodes (Rabkin and Struening, 1974).

The Holmes and Rahe schedules have been criticised on a wide variety of counts. Many of the items are either trivial, or appropriate to only a small number of people, thus raising the question of content validity when applied to special populations (i.e. older people). The restricted range of potential stressors may not be broad enough to accommodate a sufficient number of illness-generating events, thereby affecting illness predictability. Many of the items are ambiguous thus ignoring the multidimensional nature of stress, and may be influenced by cultural norms (Cochrane and Robertson, 1973, Hough, Fairbank and Garcia, 1976; Chiriboga and Cutler, 1980). Dohrenwend, Krasnoff, Askensay and Dohrenwend (1978) suggested that because the original scale was constructed using events observed to cluster at the time of disease onset, the appeareance of illness as the result of a gradual process was overlooked. This could also mean that the cluster of events may represent symptoms, as well as consequences, of disease. The use of a standardised weighting system ignores the effects of individual responses to items, and because the negative and positive changes are combined in a single life change unit (LCU) the differential consequences of changes on psychosocial functioning are overlooked (Mechanic, 1975; Chiriboga and Cutler, 1980). Also overlooked are the effects of anticipatory stress, chronic stress, the non-occurrence of events, and events occurring off schedule, on the stress attributed to

the clustering of life events. Further criticisms relate to the scarcity of published weights from groups on which the instrument is most often used (Cochrane and Robertson, 1973), the emphasis on negative items and their tendency to be linked to higher readjustment scores (Mechanic, 1975), and the unexploited potential of the measurement technique (Hough, Fairbank and Garcia, 1976).

The three major issues of life event inventories focus on the content, scoring, and clustering of events. The remainder of this review will concentrate on research into two of those factors (content and scoring), and, in addition, a brief reference will be made to the temporal dimension of life events.

2.3.1 Content

A number of researchers have studied the content of schedules in terms of variations in the distribution of stress dimensions at different stages in the life-cycle. Chiriboga and Dean (1977) identified three major dimensions of life events; those categorised according to entrances or exits; those classified in terms of desirability; and those organised in terms of their salience to major roles and activities. Focusing on the salience dimension they reported that differences reached or approached significance for frequency of experience on all nine dimensions they had identified (e.g. family, habits, home), and, with one exception, the younger groups reported more events than the older groups. Ander, Lindström and Tiblin (1974) found a fall in the mean number of life events experienced with increasing age. The average number of events reported, on the SRE, by men aged 52, was 4.0; the average number of events for men aged 62 was 3.8; the average number of events for men aged 65 was 3.6. The tendency for older people to report a general decrease in life events was further supported by Chiriboga and Cutler (1980). They also noted that older people tended

to give a lower rating to the potential degree of disruption an event might cause.

In an interesting comparison of schedules, Hurst, Jenkins and Rose (1978) concluded that items relevancy and scale content could substantially affect the median frequency of events reported. The 43-item SRE, 61-item Paykel, Prusoff and Uhlenhuth (PUP) schedule, and the 103-item Review of Life Experience (ROLE) schedule returned means of 4, 3 and 12 respectively. Chiriboga and Cutler (1980), reflecting concern, indicated that these variations were of even greater importance with respect to older people; the inappropriateness of many items raising the question of content validity.

The grouping of items into dimensions has also been used to measure the rate of decline in current stress (Horowitz, Schaefer and Cooney, 1974), and to examine differences in cultural variability (Hough, Fairbank and Garcia, 1976).

The inclusion of items in a scale that are relevant to the population being studied is clearly an important concern. A distinction has been made by Dohrenwend et.al. (1978), between the universal events of human experience and those events that vary with social and cultural settings. How the sample of events is drawn, the direction of change, desirability, and the screening of events to control for antecedents and consequences of illness are all factors relating to content, and ones which Dohrenwend et.al. contend have greater theoretical importance in the development of a schedule of life events.

2.3.2 Scoring

If the amount of literature is a guide, scoring is one of the biggest issues in life events research. Hurst (1974) has identified six major points of consideration; what is scored; who does the scoring; what reference population is used; how are events to be

scored and weighted; what summary scores should be used; and what scores are best for predictive purposes. Distress, stress and adjustment (or a combination of the three) represent different outcomes. The SRE, for example, is a measure of adjustment, whereas the PUP assesses emotional upset. The sex, race and cultural diversity of the raters can affect the ratings of events as can the reference population used to score life events; should people rate effect in terms of themselves, or people they know who have experienced the event? The choice of positive-negative scoring combinations, life change units or life change weights will affect eventual correlations with criterion indices. Finally, a decision has to be made about which summary measures will be used (geometric or arithmetic means, standard deviations, median scores) and what scores will be employed for predictive purposes (total scores, subscores, cluster scores).

Before reviewing the literature on this topic, it may be useful to identify the major approaches used in life event scoring. They can be divided into two broad categories; non-signed and signed. The non-signed group includes the LCU measure of readjustment (Holmes and Rahe, 1967), the LCW (Paykel, Prusoff and Uhlenhuth, in Hurst, Jenkins and Rose, 1978) and similar measures of emotional upset and distress and summation of frequency of occurrence. The signed approaches consist of scores based on an individual's preoccupation with the negative and/or positive qualities of events.

Hurst, Jenkins and Rose (1978) compared Holmes' and Rahe's readjustment rating (LCU) and Paykel et.al.'s measure of emotional upset (LCW) with some of their own, on their effectiveness to measure the impact of life events. Analyses indicated that the individual's rating scores (based on the ROLE) were significantly different from the total scores computed using LCW and LCU ratings. The total scores based on the normative weights were highly correlated with the number of life events experienced,

whereas total scores based on individuals' ratings better reflected the potential effects of life change.

In another study using a similar comparison, Chiriboga and Cutler (1980) weighed up four alternative approaches; Holmes' and Rahe's LCU system, standard weights derived from the averaged rating of nine psychiatrists, the simple summation of the number of events, and the respondents' assessment of the positive and negative intensity of events. The results indicated that the first three groups were highly inter-correlated and showed only minimal associations with self-reported health, psychiatric symptomatology, morale and satisfaction. The measures based on the individuals' assessments showed much stronger and more frequent correlations with criterion indices, thus supporting Hurst et.al.'s (1978) findings.

Ross and Mirowsky (1979) compared 23 methods of weighting life events in terms of how well they predicted symptomatology. Along with the undesirability and adjustment indices, they introduced and evaluated an effect-proportional index.[1] Their results indicated that, in comparison with adjustment, the undesirable characteristic of life events was more strongly associated with increased psychiatric symptomatology. The effect-proportional index, however, emerged as being a significantly better predictor of psychiatric symptomatology. This suggests that, although undesirability and stressfulness were related, other stressful properties existed.

Results contrary to those of Ross and Mirowsky were reported by Dohrenwend (1973). The comparison of undesirability with life change indicated that they were partially confounded. Langner's psychological symptom inventory was used to measure the effects of stressful life events.

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1. The effect-proportional index is an objective measure, based on the theoretical axiom that the stressful properties of an event are inferred from an individual's responses.

While all the comparison groups were related to the symptom measures, a measure of life change was most highly correlated.

In a comparison of signed and non-signed approaches, Chiriboga (1977) assessed the relative effects of LCU's, predetermined weights evaluating the degree of stress evoked by each event, summation of frequency of occurrence and a number of negative-positive preoccupation methods as predictors. He concluded that the use of predetermined weights (non-signed) was not necessarily the most effective means of prediction. The use of stress indicators based on negative or positive preoccupations resulted in wide variations in scores. This demonstrates how important it is to differentiate between the two types of events.

A somewhat different theme was the subject of investigation by Ander, Lindstrom and Tibblin (1974). As a result of their observations on the relationship between increasing age and the incidence of events, they developed a formula to correct for age differences in the sample. The Standard Life Change Total was a measure of the number of events experienced by the individual multiplied by one hundred and divided by the number of events applicable to the individual. Application of this formula, they contended, removed the differences between age groups.

2.3.3 Temporal Dimensions

An aspect of the connection between life events and health outcomes often overlooked was the timing of events in relation to the time of measurement of their effects. Horowitz, Schaefer and Cooney (1974) used a "presumptive stress" perspective to investigate the probable degree of stress the average person might currently be expected to be experiencing as a result of recent life events. They examined five aspects of the time factor; recency versus remoteness; rate of decline; experience versus non-experience; women versus men; and over thirty years of age versus under thirty years of age. Their conclusions indicated that;

recent events were more stressful than distant ones; related types of events, grouped into seven categories, all showed similar slopes of decline; while the "non-experienced" group exhibited bigger deviations in ratings, at three years there was no difference between them and the "experienced" group; women rated all the categories as more stressful at one week, but the differences had disappeared in all categories by three years; and, the younger group rated events as more stressful at one week, but by three years the differences had once again disappeared. In a more recent study, Horowitz and Wilner (1980) developed a schedule which included a temporal scoring dimension. This enabled them to obtain a total presumptive stress score based on both the incidence of events and their time of occurrence.

2.4 SOCIAL SUPPORT

There is a growing body of research, accompanied by a strong consensus of opinion, which indicates that psychological well-being, the maintenance of health, and the prevention of disease are all related to the availability of social support (McKinley, 1973; Mueller, 1980; Wellman, 1981; Gottleib, 1981). Supportive ties are of special significance when a person is faced with happenings that threaten or result in the loss of existing significant social ties (e.g. retirement, relocation, death).

Three major hypotheses describing how social support is implicated in health maintenance and reducing susceptibility to illness were proposed by Minkler (1981). The first hypothesis, concerning social networks and preventive health behaviour, suggested that where a supportive network existed, the influence of social contacts encouraged an individual to seek treatment or take preventive health action when it was needed. The second hypothesis concentrated on social support as a mediator of life stress. It was theorised that the social support provided by social

networks increased a person's ability to cope and, in doing so, raised their levels of resistance to illness. The third hypothesis, concerning social ties and the perceived sense of control, speculated that social support may help people to remain healthy via a mechanism whereby their perceived sense of support from others lead to a more generalised sense of responsibility and control.

The major focus in the present project is the mediating or "buffering" effect of social support on the relationship between health and well-being, as proposed by the second of Minkler's hypotheses. Social support is a process, composed of a number of elements. Longino and Lipman (1982) described the concept of social support in terms of the individual's physical, emotional, intellectual, psychic and spiritual maintenance or sustenance provided by other individuals, groups and institutions. Social support was defined by Kahn (in Longino and Lipman, 1982) as consisting of interpersonal transactions, including positive affect, expressed by one individual toward another; the sanctioning of another person's attitudes and behaviour; and, the provision of material or symbolic aid to someone else. A similar description was used by Gottleib (1981),who stressed that the study of social support involves consideration of the reciprocal actions occurring between the personal attributes of the individuals, the attributes of the social aggregate by which they are surrounded, and the attributes of the situational and sociocultural environment influencing the structure and behavioural patterns of the social aggregates. Gottleib's definition, however, differs to those of Longino and Lipman, and Kahn in an important respect. He introduces a contextural dimension; the situational and sociocultural variables. The relevance of context will be referred to later in this discussion.

The characteristics of social support networks have important implications on the quality of support available. They can be grouped

into two broad categories. When analysing the structural characteristics of support one needs to consider properties such as; the number of people involved in a given network (network size); the degree of network confinement to, or independence of, a particular locality (geographic disparsion); the extent of interconnectedness between members of a given network (density); and the similarity on dimensions such as age, social class and sex, and, the extent to which members share common experiences (homogeneity). The functional characteristics of support networks include; the intensity of emotional and other bonds between members and the degree of intimacy or confiding which transpires (strength of ties); the direction of exchange and the degree to which members participate both in giving and receiving (reciprocity); and, the variety of types of exchange occurring between members (multiplexity) (Minkler, 1981). The list of properties has by no means been exhausted, a number of other dimensions have been identified by various authors (Mueller, 1980; Wellman, 1981).

The wide range of functional and structural properties defined reflects a considerable variation in agreement among researchers over the nature, meaning and measurement of social support (Gottleib, 1981). This makes comparisons and summarising of studies difficult. Longino and Lipman (1982), for example, adopted two main approaches from which they conceptualised support systems. The "provision of support" was associated with who the givers were (e.g. family, neighbourhood, agencies) and what needs their support was aimed at. The "individuals appropriation of support" referred to the combination of resources (givers) that were providing the support received by the individual. Primary (personal, informal) and secondary (impersonal, formal) levels were identified, the former providing more flexible but less stable support, and the latter providing a more stable, more formal and more rigid support. Both systems were linked. Mueller (1980), on the other

hand, conceived three levels of individual networks; first order, described as the direct connections the focal individual had with others and the connections linking those individuals with each other; second order, described as the direct linkages of focal individuals to others; and, the extended network, described as the connections linking second order members to larger populations. The emphasis of a study by Hirsh (1980) represented yet another view. He conducted an exploratory investigation aimed at identifying the natural support systems that increased an individual's ability to cope with major life changes. Defined as "the set of presently significant others who are either members of one's social network or affiliated non-mental health professionals" (p.160) the emphasis was on a much narrower, discrete group of potential supporters than those implied in the other two conceptions.

Once defined, the next step in the validation or refinement of a social support model is a study. Even though social network and social support research has been carried out over a number of years, the social support field is still sadly lacking in psychometrically sound instruments (Barrera, 1980). Validity and reliability analyses have rarely been conducted, and the method of measurement has tended to be in the form of personal interview; as opposed to direct observation. There are obvious limits to what can be achieved. The benefits to be derived from constantly following an individual and recording their contacts are considerably outweighed by the practicalities of the situation, unless they focus on a particular type of contact. The personal interview or survey method for identifying members of a support structure can assume a number of forms. The subject could be asked to name people who were important to them. This raises the question of what is meant by "important". The term is ambiguous and not necessarily synonymous with support. A second method asks subjects to identify

network members on the basis of their relationship to them. The friend or relative identified, as above, may not necessarily be supportive.

Social support is only one type of relationship contained within a social network. Any attempts, therefore, to identify support providers using the network as the basis of collection are likely to result in contamination by non-supportive members.

The third method is based on the definition of specific criteria. The use of behavioural descriptions, where the emphasis is placed on categories of support, is a more reliable method for the identification of individuals who provide specific types of support. Two schedules, the Arizona Social Support Interview Schedule (ASSIS, Barrera, 1980) and the Inventory of Socially Supportive Behaviours (ISSB, Barrera, Sandler and Ramsay, 1981) are good examples of this approach.

The main purpose of the ISSB was to assess the frequency with which individuals received various forms of support or assistance. The inventory was composed of 40 items which identified tangible forms of assistance, such as goods and services, as well as the more intangible forms, such as guidance and expression of esteem. The items and ideas for their construction were obtained from empirical research, literature reviews and discussion articles related to social support. Overall, the results concerning the test-retest reliability, internal consistency, and network size indices, were encouraging. Perusal of the inventory, however, raises the question of its appropriateness to all populations. The items concerning money, the setting of goals, and expectations possibly have more relevance to younger people. The fact that it is designed to assess the number of natural transactions received in a specific time period isolates actual support, but precludes information about potential support and whether or not all needs were satisfied.

The function of the ASSIS is different to that of the ISSB. It was designed to enable identification of individuals who provided

specific types of support. Barrera outlined six categories; material aid, described as providing money or other physical objects; physical assistance, described as the sharing of tasks; intimate interaction, described as interacting in a nondirective manner, and, expressing feelings and personal concerns; guidance, described as offering guidance and advice; feedback, described as giving individuals information about themselves; and, social participation, described as engaging in social interaction for fun, relaxation and diversion. Two questions were developed for use with each category, the first to identify the amount of potential support, and the second to determine who had actually supplied support within a specific time frame. Results indicated a high test-retest reliability, and reasonable internal consistency.

In the investigation of the stress buffering process, it is necessary to determine how potential supporters become actual supporters. Eckenrode and Gore (1981) pointed out that in order to do this, one needs to consider the context within which mobilisation occurs. The forces constraining mobilisation are both objective and subjective. Physical distance, the existing level of demands on people potentially available for support, and the sociocultural values and beliefs mediated availability. The stress already present in a social network can limit the potential support available, and thus affect an individual's ability to cope. Wellman (1981) expressed similar thoughts. He noted that many social support analyses have been context-free, without reference to either the locality or social class of the sample. A social support analysis must take into consideration the wide range of pressures that make support necessary and the distribution of resources available to people if it is to be meaningful and relevant.

The amount of research investigating, and evidence substantiating, the "buffering" role of social support is growing. Gore (in Minkler,

1981) investigated the role of social support on 110 men who were made redundant as the result of a plant closure. Findings indicated that those who had higher levels of social support were less likely to show mental and physical health problems than men who perceived themselves as having less social support. The existence of strong supportive networks away from work were, according to Atchley and Burgess (in Minkler, 1981), implicated in the successful adjustment and positive health outcomes of retirees. The circumstances surrounding retirement and redundancy differ, but similarities can be drawn. The compulsory retirement policies of many organisations may result in similar effects being felt by retirees who, dependent on the work-place for such things as satisfaction and income, have no wish to cease working, and individuals who are made redundant.

Longino and Lipman (1982) studied the relationship of marital status, and the presence of living children, to social support among older women. They attempted to control for formal resource availability and background characteristics by using 371 non-institutionalised female residents of two care communities. Findings indicated that more emotional, social and instrumental support was received from family members by women who had been or who were still married. In an earlier analysis, Longino and Lipman (in Longino and Lipman, 1982) reported that among older persons, the nature of support received varied according to gender and marital status. Those who were married had more primary relations than those who were unmarried. Married women received the most support, and unmarried men the least support. The greatest informal resource deficits were found among spouseless men. For women, the presence of a spouse only assured them instrumental, task-oriented support; the men seemed unable to, or perhaps did not want to, meet their wives' emotional and social needs.

Stein, Linn and Stein (1982) conducted a study to determine

whether having a neighbour who could be counted on for help in a crisis situation, or a neighbour who could count on receiving help from the same person, could differentiate groups of elderly in terms of personal characteristics, physical health and psychosocial functioning. They divided 158 elderly retired who were living in retirement hotels and apartments into four groups; givers; getters; givers and getters; and neither givers nor getters. Results indicated that although there was no difference between the groups in personal characteristics, the "neither givers nor getters" functioned significantly less well both physically and psychosocially. The situation at a six month follow-up revealed that givers had fewer illnesses, and the getters and givers had higher self-esteem.

Hirsch (1980) conducted an exploratory study to investigate the relationship between a natural support system and measures of symptomatology, mood and self-esteem. The sample consisted of twenty younger recent widows and fourteen older women who had returned to university. The findings indicated that cognitive guidance was significantly associated with less symptomatology and better mood; and socialising enhanced self-esteem. The lower density support schemes and multi-dimensional friendships were significantly associated with better support and mental health. This all suggests that helpful support heightens adaptation to stress. An interesting point was that membership or higher density natural support systems may actually weaken coping ability. The quality of a system, therefore, may be more important than the quantity of ties.

Mueller (1980) suggested that couples in an insecure marriage with well-segregated roles, who belonged to close-knit, same sex networks, were more vulnerable to disruptions in their social networks (e.g. a change in residence). The separation from important sources of support provided by the family and friends could place extra strains on the relationship,

with couples finding it difficult to adjust to a reliance on one another for emotional support. In situations where this problem existed, the effect of retirement could exacerbate it even more.

Social marginality is a condition, or state, believed to be implicated in the link between social support and health. It is broadly defined as being characterised by weak and impermanent ties within one's community (Minkler, 1981). Minkler identified the elderly as being particularly vulnerable, either through reasons of having to move, or death of a spouse. The view of Pilisuk (1982) was that insufficient or disrupted ties increased the susceptibility to mental and physical illness. He introduced the notion of "social innoculation", and described the manner in which it worked:

> "Probably through the important role of other people as predictable abatements to one's self-esteem and powers of coping that social supports affect our restorative and physiological and psychological capacities and ultimately the various immune systems of the paper" (p.25).

He suggested that the growing dependence on voluntary organisations for social support arises from the breakdown of traditional kinship support. Changes in life-style and increased mobility affected the power and the ability of the family buffer system to provide support.

The preceding review has concentrated on the role of social support in mediating the outcomes of functional health and psychological well-being. The current emphasis has been on the measurement and effects of social support. It is clear from the abundance of definitional terms and their overlap, and the models proposed, that social support theory is still developing. In view of the obvious benefits accrued from social support, continued research into its properties, processes and outcomes is necessary, not only to gain a greater insight of how the social support and health relationship operates, but also to provide a standardised and integrated theory of social support.

2.5 INTEGRATION AND RATIONALE

The preceding literature review, while presenting a broad overview of the concepts, arguments and criticisms associated with relocation, life events and social support, has done little to integrate them. Although a common theme to all three, relocation is discussed in different contexts.

Relocation has been investigated as a discrete event, with particular attention being paid to its health and well-being outcomes. Research of this type has focused on stress that could be directly attributable to moving. Relocation is a life event, and, as such, has been included in life events schedules (e.g. Holmes and Rahe, 1967; Dohrenwend et.al., 1978) designed to measure and/or predict symptomatology. Its role, in this context, is as a contributing factor in the assessment of a general level of stress. Relocation has also, to a lesser extent, been mentioned in relation to the effects it can have on social support and how, in turn, social support can mediate the relocation experience.

For the purposes of the present study concepts and methods taken from the relocation, life events and social support literature are used to investigate factors involved in relocation among the retired, both the preceding circumstances and the outcomes.

The items of interest which apply only to those relocating include such things as previous relocation behaviour, the influence of other people in decision-making, the reasons involved in the decision to move, familiarity with the new environment, and feelings (or perceptions) of satisfaction and acceptance. Questions of these types reflect the concepts of control, predictability and congruence (Schulz and Brenner, 1977; Stokols and Shumaker, 1982), but it is not intended that complex statistical procedures be used to determine the relative contribution of each. Such analyses are beyond the scope of this study. What is

important, particularly for future research, is the establishment of a data base on which further research can build. The present investigation is designed to go some way toward providing just that.

Relocation is often reported as being a stressful event, the extreme outcome of which is ultimately death (Rowland, 1977). Early studies, in particular, have used mortality rates to measure and compare the effects of relocation on individuals who have moved with those who have not moved (e.g. Blenkner, 1967). The argument for using such a measure is based on the assumption that health decline is more difficult to define and, therefore, more open to dispute. The use of this method would require either a longitudinal design or retrospective study. The time constraints of the present project precluded either possibility. More recent studies have, in fact, focused on morbidity and outcomes less final than death. A variety of these will be used in this study.

The tendency to view relocation in isolation when investigating its effects meant little regard was paid to the influence of other sources of stress on health outcomes. One aim of the present study was to use a life events schedule in conjunction with the study of relocation to assess the role of other stressors. The "buffering" effects of social support are well documented in the literature (Hirsch, 1980; Longino and Lipman, 1982). It was hoped that the existence of a relationship between relocation status, physical symptomatology and social support could be demonstrated. Depending on the outcomes of such a comparison, further analyses could be performed to investigate the role of other key variables (e.g. life events, perceptions of health).

A further aim of this project was to compare relocation status with general variables such as demographic characteristics, family situation and retirement-related items. This would provide valuable recent data on the retirement situation as perceived by the retirees

and, if desired, give further opportunity for comparative analyses with social support and physical symptomatology.

The researcher felt that the inclusion of tools which were capable of measuring more than one source of stress, and which took into consideration mediating factors was both a desirable and necessary feature.

The review of relocation literature was somewhat critical of the methodologies used in a number of the studies. It is recognised that the present investigation suffers from many of the same shortcomings. The present study was designed, however, to gather data on factors involved in relocation and to determine whether or not relocation is stressful to the extent that its effects can be measured by such things as physical symptoms, and other perceptions of health.

CHAPTER 3

METHODS

3.1 SAMPLE

The sample contained both retired men and women, their ages ranging from the mid-fifties through to the late seventies. The original intention was to have a strictly male sample as it had been assumed that the number of women retiring from full-time paid employment would have been too few to achieve a similarly sized matched sample. The present research, however, is exploratory in nature so it was later decided that where women who fitted the criteria were available, they would be included.

A major aim of the study was to compare the relocated sample with the non-relocated sample for differences in stress related factors. Implicit in this study is the assumption that relocation stress is a consequence that may endure over time, rather than an effect that occurs only at the time of moving (Stokols and Shumaker, 1982).

The distinguishing characteristics of the chosen individuals were:

(i) retired (preferably for less than 10 years prior to the interview);

(ii) owner-occupier;

(iii) not receiving any financial reward for work;

(iv) being of reasonable physical and mental health; and

(v) either (a) non-relocated (residing at the same address for more than 10 years at the time of the interview),

or (b) relocated (residing at their current address for less than six years at the time of the interview).

The study was conducted in Nelson. The compact nature of the city, its accessibility to the researcher, and its reputation as a retirement centre, were the reasons for its selection.

There were a number of possibilities with respect to which relocated individuals would be studied. Included among these were all retirees who had moved in the previous six years (renters and home owners), retirees who had moved only within Nelson city (as defined by the Representation Commission, March 1983, NZMS 90, Sheet 16), those who had relocated to Nelson from outside the area, and those who had moved into purchased (not rented) accommodation.

The decision was made to study retirees who had moved to Nelson from outside the city as well as those who had moved a reasonable distance within the Nelson Province, and for which the move had been into a purchased residence (be it a house or flat).

The factors affecting people living in rented accommodation are sufficiently different to those associated with owning one's own residence, therefore, renters were not included.

The criterion that retirees be receiving no financial reward for work was stipulated in an attempt to minimise differences due to an ability to earn. The case for some may have been that they wanted to work to augment superannuation or other income, but the employment situation was such that they were unable to secure a job. For others the desire to "work" may have been associated with non-economic factors such as maintaining self-esteem and outside contacts, or as a way of fending off boredom. People who wish to satisfy these needs may do so through voluntary work. The desire for money (as a motive for working) may make an individual somewhat different to those who do not wish to or cannot work, or those who are involved with voluntary organisations.

The screening of people, over the telephone, to meet the criteria of reasonable physical and mental health posed a minor problem. Health

difficulties, as it turned out, were the main reasons given for not wishing to participate. Some were chronic, such as emphysema, and others were more acute, such as recovering from the flu or a minor stroke. One or two unsuitable candidates did slip through the screening and these were discarded following the interview.

The length of time separating movers from non-movers was again arbitrary, the main aim being to ensure that those classified as non-relocated were reasonably well distanced in time from those who were classified as relocated. In retrospect, more care should possibly have been exercised in time-differencing the two groups.

The main sample was obtained from two sources - the Nelson General Electoral Roll 1979 and the Local Body Electoral Roll update 1983. Both electorates shared the same boundaries (according to NZMS 90, Sheet 16). The sample was initially drawn from the 1979 Nelson General Electoral Roll. The criterion for selection was occupation stated as "retired". An essentially random procedure was employed for gathering subjects - every tenth name with the occupation stated as "retired" was selected. Table 3.1 presents a comparison of the marital status of the sample as a whole with people aged 55 years and more at the 1981 Census.

Table 3.1 Marital Status

Status	Overall frequency of sample	Response %	1981 Census (Males) %	1981 Census Male/ Female %	1981 Census (Females) %
Married	60	76.92	77.53	63.99	52.79
Spouse Deceased	9	11.54	9.9	23.67	35.04
Separated	2	2.56	2.37	1.97	1.64
Marriage ended/ Divorced	1	1.28	2.91	2.09	2.89
Never married	6	7.69	6.83	7.08	7.29

The research sample percentages most closely resemble the male 1981 Census data. This is to be expected as N=63 (80.77%) of the sample were men. The influence of women in the sample tends in the direction indicated by the statistics for female marital status in the same age group. This shows that, for marital status at least, the random sampling procedure yielded an acceptably representative sample of the population over 55 years of age.

The decision to select people on a "retired" occupation basis was an arbitrary one. People listed as "pensioners", "superannuitants", "widows", and "widowers" were not included. Although there was no evidence to suggest that individuals using those occupational labels differed in kind from "retired" individuals, it was more the case that "retired" somehow appeared better related semantically to occupation (in this context, prior occupation) than did pensioner and superannuitant (an income-source related title) or widow/widower (a marital status related title). It was felt also, that these categories may have yielded a greater variation in terms of age, tenure and length of time since retirement. No attempt was made to follow up a sample who used those labels so it is not known how valid these assumptions were.

The rationale for using electoral rolls, as opposed to other sources, was that the legal requirement to be registered ensured that the majority of potential subjects should be contained therein. Names were not obtained from organisations to which people belonged because it would have contributed to a biased, non-random sample. This point is especially relevant in the context of the present study as the creation of ties with a club or some other body could be interpreted as a successful move in the development of an atmosphere facilitating social support. There may also be a considerable time lapse between people relocating and their joining an organisation.

Although there is some delay between people moving and registering

in their new electorate, electoral rolls presented themselves as the most accessible sources available from which the names of individuals who had relocated could be located.

It was desirable that as representative a sample as possible of the retired population be tapped so as to allow adequate opportunity to examine the diverse characteristics of its individuals. The rolls appeared to be the most appropriate agents able to fulfil this research demand.

The list of names obtained from the 1979 roll was separated into the following three groups using the 1978 General Electoral Roll:

(i) those who stated their occupation as one associated with employment;

(ii) those who stated their occupation as retired, superannuitant, widow, etc.; and

(iii) those whose names did not appear.

Group (i) was retained to provide potential subjects for the retired non-relocatees sample. Subjects in this group, it was felt, were more likely to be recently retired than those in Group (ii) (Group (ii) was discarded). Group (iii) was retained because it provided potential subjects for the retired relocatees sample.

This step was followed by examination of the 1981 and 1983 rolls to follow the progress of the potential sample. Change in status, change of address or absence of a previously recorded name was noted. The Local Body Electoral Roll updates were not so randomly used. Every "retired" individual was included because the list was short. Appendix 1A-D presents an analysis of the sampling process.

Sampling was performed on four separate occasions:

t1 Source: General Electoral Roll - relocated and non-relocated;

t2 Source: Local Body Electoral Roll - relocated;

t3 Source: General Electoral Roll - relocated and non-relocated; and

t4 Source: Local Body Electoral Roll - relocated.

This was because;

(i) After carrying out the initial telephone contact session (t1) the response rate of potential subjects was too small to produce a sample. Therefore, following the same procedure as before, another list of 'potentials' was created (t3).

(ii) New enrolments for the Local Body Elections could only be supplied as they came to hand (t2 and t4).

From the total number of people with whom contact was made, (N=208, unsuitable/unwilling to be interviewed and willing to be interviewed grouped together. See Appendix 1B, 1C) 101 (48.5%) were willing to be interviewed (49.5% of the relocated group and 47.5% of the non-relocated group). A breakdown of the reasons for the loss of 107 potential subjects (50.5%) is also included in Appendix 1B and 1C. Sampling at t1 suffers from a serious lack of information regarding the reasons for not wishing to or not being eligible to participate. This was unfortunate as it was the largest of the four groups. From memory, "no wish to participate", "renting" and "health" were the three major reasons for rejection or refusal. More care was taken to record the reasons for t2, t3 and t4 sampling occasions. Eighty-four (83.2%) interviews were arranged. The final sample consisted of 42 (79% of those initially willing) relocated subjects, 36 (75% of those initially willing) non-relocated subjects, 4 rejections (did not meet criteria) and 2 who were not interviewed due to personal reasons (bereavement in one case) arising between the time an appointment was set and the interview date.

3.2 THE INSTRUMENT[1]

The interview schedule, consisting of two sections, one a general

1. A complete copy of the instrument is included in Appendix 2A.

section administered to all individuals and the other relating specifically to relocation, was developed from a variety of sources and instruments. Administration was in the form of personal interviews conducted during a two-month period. All the interviews were performed in the respondents' homes and took from one to two hours to complete, depending on the respondents' relocation - non-relocation status.

The relocation items were designed to elicit information about the subject's pre-move physical situation, post-move physical situation, decision-making, and perceptions of the current situation. The general section contained items about respondent's characteristics, the retirement situation, the retirement decision, health situation, life-events and support.

The researcher believed that potential stress sources are influenced by and in turn influence various factors, such as demographic characteristics, the retirement decision, support networks and perceived health. Therefore, in order to assess the complex interrelationships of potential stress sources, a wide range of variables had to be measured. No single instrument capable of measuring the desired combination of factors was available. As a consequence a schedule was created from a number of sources.

Scales designed to measure psychosomatic symptoms,[2] life events [3] and social support[4] were adapted from already existing schedules. Questions dealing with demographic variables and items related to relocation were drawn from the Mobile Workforce Interview Schedule

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2. General (Physical) Health Questionnaire (Adapted from Aurin) Marshall and Cooper, 1979.

3. Social Readjustment Rating Scale; Holmes and Rahe, 1967. Psychiatric Epidemiology Research Interview; B.S.Dohrenwend, Krasnoff, Askenasy and Dohrenwend, 1978.

4. The Arizona Social Support Interview (ASSIS); Barrera, 1980.

(Higgs, Thomas and O'Driscoll, 1983), ideas generated by points raised in the literature, through feedback from people involved with retirees, and from the pilot sample. The following section presents a more detailed discussion of the three major scales used, their origins, and reasons for altering their content and scoring is presented.

3.2.1 Social Support

The scale used to elicit information on social support was one developed by Barrera (1980). The Arizona Social Support Interview Schedule (ASSIS) was derived from a conceptual analysis of the social support literature. The six categories of support identified in the analysis were material aid, physical assistance, intimate interaction, guidance, feedback and social participation. The corresponding items that formed the ASSIS were construed as material aid, physical assistance, private feelings, advice, feedback and social participation. Two other features, one concerned with negative interaction and the other with the personal characteristics of the network members were also included.

The decision favouring the use of the ASSIS over other measures was based on the following points. Firstly, the ASSIS appeared to be the only instrument available that provided a means of identifying individuals in a subject's network who fulfilled specific support roles. Other scales typically asked individuals to identify network members on the basis of their relationship to them, or to list people who were in some way 'significant' or 'important'.

The second point relates to the availability of reliability data. The ASSIS had the benefit of some data on its reliability and other related psychometric properties. Prior to its development, with one or two exceptions, little information was available on evaluative criteria.

> A thorough search in the social and psychological inventories of scales has failed to uncover any measure of social support with either known and/or acceptable properties of reliability and validity.
>
> (Dean & Lin in Barrera et.al., 1981)

Network reliability indicies were determined from a sample of 24 female and 21 male university students, with a 2-day gap between scale administrations. For each category of support, and for both perceived and actual supporters, Pearson product-moment correlations were calculated for the number of individuals named in both the first and second interviews. All test-retest correlations (with the exception of guidance) were significant ($p<.01$) and ranged from .73 to .87. A high test-retest reliability coefficient was also obtained for both perceived network size, $r(43) = .88$, $p<.001$, and actual size, $r(43) = .88$ $p<.001$. Although there was marginal reliablity of individual support categories (48% - 73%) the total network membership reliabilities for perceived and actual network size were 79.5% and 73.8% respectively. Internal consistency reliabilities of the six positive support categories were calculated for both perceived and actual support, with moderately high coefficient alphas of .779 and .740 being obtained for each respectively.

The ASSIS has also been correlated with another support scale, the Inventory of Socially Supportive Behaviours (ISSB) (Barrera, Sandler and Ramsay, 1981). There were significant correlations with the ISSB of both available ($r(43) = .442$, $p<.05$) and actual social support network size ($r(43) = .322$, $p<.05$) (Barrera et.al., 1981).

Finally, although the total time of administration of the ASSIS was reported to be 15-30 minutes, in terms of the overall content of the questionnaire used in this project, this proved too long. Consequently, only questions relating to potential support were asked. The item on positive feedback was excluded as it was found, during the course of the first few interviews, that understanding of the concept was poor.[5]

5. The ASSIS was used in place of the ISSB, and there had been no opportunity to pretest it. See Chapter 3.3, point (v).

This was done in part to avoid complications in interpreting the final results, and also to save time in trying to explain to subjects what the question was getting at.

The major reasons for the non-utilisation of the alternative scales were as follows:

(i) Availability: actual examples of scales were not readily accessible and, based on the literature evaluating them, the chances that the scale would be appropriate was low.

(ii) Suitability: a point well illustrated by the ISSB, which was the initial choice for use, is that even where a scale and reliability data are available, its suitability for application to a different population can only be determined as a result of its administration. In the case of the ISSB, Barrera et.al., (1981) noted:

> ...one limitation of the present report is that data were collected from a single population, college undergraduates (p.10).

3.2.2 Life Events

Taking into consideration the number of scales already in existence, the various methods of weighting life events, the criticisms, limitations and advantages, and the retired population to which a life events scale was to be administered, it was decided to construct a new scale out of those previously developed. In doing so the following points were taken into account:

(i) The content of many life event inventories is uncertain when investigating a broad age range.

(ii) A general decrease in the experiencing of life events is associated with increasing age, thus many scales included surplus events that retired people would not experience (such as, birth of first child).

(iii) As the degree of disruption potentially represented by various life events is considered to be rated lower by older people, the

weights based on a general population would be both inappropriate and inaccurate.

(iv) Whereas the majority of scales aim to relate the magnitude of life-change to illness, the main objective of using life events in the present research was simply to determine the frequency and type of events experienced over the 12 months prior to the interview, and to see whether they were in some way related to other factors under investigation.

As a result, the method of scaling adopted consisted of simply summing the events experienced; separating them into negative, positive and neutral effects. A number of studies have in fact found high correlations between the sum of events and scores (Dohrenwend, 1973; Rahe, 1974), based on the normative ratings of the magnitude of adjustment. As a method of scoring, this option was simple and reputedly sound. Life events that appeared to have a negligible chance of occurrence were excluded and one or two having increased impact were added (for example, loss of a driving licence). The sources, and changes made to various life events, are detailed in Appendix 2C.

3.2.3 Psychosomatic Symptoms

A variation of the General (Physical) Health Questionnaire (Marshall and Cooper, 1979) was used to assess the frequency of physical symptoms over the month prior to the interview. The scale, an adaptation of the Gurin Psychosomatic Symptom List, contained symptoms which were widely agreed to be potentially stress-induced. A number of items were left out because it was felt they were not appropriate to the age and sex of the sample (shortness of breath when not exercising or working hard, a tendency to cry easily etc.). Six items from the Mobile Workforce Project schedule were used (including three relating to positive well-

being).[6] The rating scheme used in that project was also adopted for the present research. Gurin's scale had the advantage over other similar measures of being short, relatively non-clinical, and of having a well-documented use in social science research. It must be remembered, however, that because of the older age of the sample and the tendency for some symptoms to be age-related, caution in the interpretation of findings would need to be exercised.

3.3 PILOT TESTING

A pilot study sample drawn from Christchurch-based subjects was initially difficult to obtain.[7] Numerous avenues were explored in the hope of finding relatively recent retired relocatees. These included the WEA, local borough and county councils (who were not helpful because of sensitivity due to impending local body elections), the Land Transfer Office, Post Office, Churches and the Waimairi County Library. The logic behind contacting churches was based on the assumption that the local church would be one of the first organisations someone might join following a move. Half a dozen were contacted and agreed to place a notice in their local newsletter. The response rate to this was very low; only three individuals were accessed (information later obtained from a question about church attendnace indicated this assumption was ill-founded). The major source of suitable subjects were the newly-enrolled members of the Waimairi Library. Their dot coding system, differentiating between senior citizens, students and all others, provided a reasonably easy means of isolating those who had recently enrolled and who were receiving superannuation. Thirteen suitable respondents accessed through this source agreed to participate. A total

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6. Appendix 2E cites the sources of items utilised in the scale.
7. At this stage use of electoral rolls had not been contemplated.

of N=16 relocated retired individuals constituted the pilot sample.

Some of the pre-test subjects were interviewed personally (N=7) to determine the more appropriate method of data collection. The remainder were left with the questionnaire to complete on their own (N=9). This was followed up by a brief discussion when the schedule was collected.

The first administration highlighted a number of problems. The most noticeable of these were:

(i) inadequate provision of response categories;

(ii) the reliance on memory of past events;

(iii) problems in question interpretation created by item ambiguity;

(iv) the low number of life events experienced, and the assumption that they would be either positive or negative, and not a combination of the two, or neutral (i.e. taking a vacation, although overall a positive experience, can have its problems); and

(v) poor understanding of the concept of social support as portrayed by the ISSB.[8] Most respondents overlooked the role of their spouse (assuming she or he was supportive) and answered in terms of friends or other family. Such was the lack of understanding of the social support form used in the pre-test that a completely different one was introduced (the ASSIS) in the main study. There was no opportunity to pre-test this version. It did, however, prove more successful to administer and elicit replies.

The points highlighted above aside, those who self-administered claimed they had little difficulty in completing the questionnaire. The fact that stress was a major focus of interest, was not made known to the pilot sample. Anyone familiar with the topic may have recognised some of the scales used. No-one, however, reported feeling threatened or

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8. For reference and comparison purposes, a copy of this scale has been included in Appendix 2F.

uncomfortable by any of the more personal items, or queried the intent of those questions. Suggestions made from discussions following the interview resulted in the inclusion of more items that were relevant to relocation.

Problems (i) and (iii) were reasonably straightforward to deal with. Bearing in mind much of the information required was dependent on past events, little could be done to effectively get around the memory aspect. Some questions and their answer formats were reworded however. It is a fact that as people grow older they, on average, experience fewer of the life events on most of the well-documented scales. Section 3.2 on questionnaire development discusses this issue. The scoring system (negative, positive or neutral affect) was retained. If an individual was at all in doubt, they had to say what they felt most. As mentioned above, the Arizona Social Support Interview Schedule (ASSIS) was used in place of the ISSB.

Referring more specifically to the relocation section, not only were seven new questions introduced, wording changes were made to a number of other items (questions 3,5,9,14). It was found that three of the questions in the pilot survey asked for very similar information so two were dropped, and question 32 was repositioned to follow question 31. The new questions were question 11, asking what suburb the respondent now resided in; questions 25 and 26, depending on the response to question 24, asked how a person went about making new contacts, or why was it difficult to meet new people; question 27 asked how many neighbours a person had; questions 33 and 34 were related to adjustment and acceptance into the community respectively, and question 38 dealt with possibility of moves anticipated for the future.

The general section required fewer alterations. A new question was introduced (question 8) asking whether a person retired from their 'career' job but proceeded to keep on working. Questions 14 and 33

asking about the number of living children and retirement choice were also introduced. An item on date of retirement was dropped as was a life event relating to disasters. Question 27, although retained on the schedule was not asked, mainly because the pre-test highlighted the fact that people were unable to judge with much confidence, whether or not they were experiencing a symptom "more than before".

Although self-administration presented no more problems than the personal interview, it was decided that the questionnaire would be administered personally. The major factor favouring that course was the opportunity it provided for probing the thoughts and reasons behind the replies respondents made to the various questions. Conducting a personal interview also ensured that where a respondent had difficulty in understanding a question, clarification was possible. As the sample located was small, this method of administration ensured that as high a response rate as possible would be achieved.

Other than the changes mentioned above, minor modifications were made to the format of the questionnaire. Item position was standardised, the direction for answering questions under self-administration were removed and instructions appropriate to interviewing were introduced.

The major task of the pre-test was to sort out problems with the questionnaire, and to elicit comments about its content. The pilot sample was drawn from sources which could have indicated a certain level of community involvement or potential support for the respondent, thus introducing a potential for bias. At this stage, however, this was not an important issue.

3.4 THE MAIN STUDY PROCEDURE

Initial contact was made by telephone in Nelson in July 1983. This was to ensure there was a large enough pool of people to draw on, and that they would be willing participants. The introductory call covered the following points:

(i) identification of the researcher and the institution she was associated with;

(ii) the source from which their names were drawn;

(iii) the need to briefly but concisely outline the nature and purpose of the study, and to inform the individual what the data would be used for;

(iv) to invite the individual to participate in an interview, and to give an idea of how long it would take; and

(v) to stress the anonymity and confidentiality of the individual and the information they would provide.

Information the preliminary call needed to elicit included:

(i) whether or not the person was fully retired; this was qualified by asking whether or not they were working for some monetary or remunerative reward;

(ii) the length of time the person considered they had been retired for;

(iii) whether or not they owned the residence in which they were living;

(iv) the length of time they had lived there; and

(v) whether they had moved following their retirement.

Although two separate lists had previously been drawn up (as a result of the sampling procedure) the outcome of the screening questions resulted in the potential sample being allocated to one of two groups - relocated or non-relocated.

Appointments were not made at this stage, only an undertaking that contact would be made with them again in the next 6-8 weeks.

Interviewing took almost 2 months to complete. It covered the period from Monday 19 September to Friday 18 November. Appointments were usually made on the Wednesday prior to the week of interviewing; in some cases they were made up to 3 weeks in advance with reminder calls being made closer to the time.

Two hours were allocated for relocation interviews and one and a half hours for non-relocation interviews. Interviews were conducted at the respondents' homes. On occasions the time limit was exceeded, and in two instances a further appointment was necessary to complete the interview.

An explanatory cover sheet was presented to the interviewee prior to commencing the interview. There were two versions, one for relocatees and the other for non-relocatees. The information contained in the communication covered the following:

(i) Non-relocated - the need to clarify the overall purpose of the research which was to study the relocation of people after they had retired, and to stress the value of participation in the project of people who had not relocated following retirement (non-relocatees provided a reference group to which relocatees could be compared). Relocated - the need to clarify the overall purpose of the research - which was to study the relocation of people after they had retired, and to identify particular areas that were considered significant to relocation.

(ii) The exercise was not a test, and the participants identity and information given would remain anonymous and confidential.

(iii) The form the interview would take, and appreciation of their participation.

A copy of these cover sheets can be found in Appendix 2C.

The relative advantages of using the personal interview approach for this project have been dealt with elsewhere. One of the major drawbacks associated with this method was that interviewing in the home often involved a spouse being present. Although efforts had been made to emphasise that it was Mrs. X or Mr. Y for whom the interview was intended, it was difficult (and presumptuous to want) to exclude their companions. Consequently, in a number of cases where spouses did not withdraw, their

presence could have affected replies, particularly those relating to some of the more personal items. It was typically the case however that having met a couple the person not involved would leave. Undoubtedly there were also "walls with ears". The researcher does not know the extent to which these factors would have influenced replies, especially for items on personal relationships or where an opinion or rating of satisfaction was required. It was interesting to note, however, that in cases where a spouse was present, if there was some difference in opinion over the answer to an item, the respondent did not change to bring his or her reply into line with that of their partner's.

Wording and question structure were kept as simple as possible, and no one appeared to experience any difficulty in following the verbally communicated items. To aid in replying to questions where the same response categories were used for a set of items, cards were utilised so that the respondent had the answer categories in front of him or her. This was to ease the burden of having to remember a list of response items and think about the question at the same time. It was noticed that a very small number of respondents did not use the cards, preferring to choose from a verbal dictation of response items. In one or two instances it took much prodding and persuasion to get the interviewee to answer in terms of the response categories, and where all efforts failed a "Not Ascertained" response was recorded. This situation did not, however, often arise.

Only a handful of people (less than six) recognised the stress symptoms checklist as that and they all had medical backgrounds. Most of the sample said they enjoyed the experience. The interview was concluded by thanking them for their co-operation and participation, and indicating that it was hoped a brief set of results could be made availble to them locally (Appendix 2G).

CHAPTER 4

RESULTS

4.1 INTRODUCTION

The analysis of the data gathered from the present study is dealt with in three sections. No studies of a similar type were available at the time of analysis, so no attempt was made to perform any special tests for comparison purposes. Measurement was, for the most part, at the nominal and ordinal level, resulting in the use of fairly simple statistical techniques. Sample size, particularly when dealing with the relocation section only, was a limiting factor in test selection and the interpretation of results.

The SPSS package (Nie et.al., 1975) was used to obtain frequencies and perform cross-tabulation, chi-square, Kolmogorov-Smirnov and Mann-Whitney analysis. Some analyses were performed by hand to correct an error in scale development. Yate's correction for small samples was considered, but in view of the fact that it can over-correct to the extent its new value is as far from the true value as the uncorrected value (Croxton, Cowden and Hern, 1968, cited in Norcliffe, 1977) it was not used.

General demographic information is presented in section 4.2. A distinction is made between the relocated and non-relocated groups for most of the analysis. Frequencies, and where they exist, significant chi-square analyses are presented for a selection of other variables including health ailments, life events and social support categories.

Section 4.3 contains data relating to the stress indicator items and their relationships with a number of variables considered to be

relevant in the context of the study. Two scales in particular, one a measure of the incidence of physical symptoms, and the other the degree of support available, are compared with measures of health.

The relocation subsample is dealt with in section 4.4. Frequencies and cross-tabulations are presented, illustrating the nature of the relocation experience for owner-occupier retirees and their perceptions regarding the community and future relocation plans. Results are discussed in terms of the pre-move physical situation, the post-move physical situation, decision-making and perceptions of the present situation.

The results of a telephone follow-up of the sample carried out in February 1986, approximately two and a half years following the original interviews, are referred to briefly in section 4.5.

4.2 THE GENERAL SAMPLE PROFILE

4.2.1 Respondent Characteristics

A summary of selected demographic variables is presented in Table 4.2.1. Apart from education, there is no significant variation between the relocated and non-relocated groups in the sample. The sex variable is well over-represented in favour of the males. This is to a large extent a reflection of the sampling procedure used - it would be fair to say more males stated their occupation as retired compared with females. Sex, as a separate variable, was not used in further group comparisons.

As a discrete group, the 59 years or less relocated age group had six members, as compared to the one non-relocated individual. Overall however, this discrepancy was not significant.

Again, no appreciable differences emerged among the religious affiliations of the relocated - non-relocated samples. In comparison with the overall Nelson religious profession structure however

Table 4.2.1 Relocation status by selected demographic variables.

Selected Variables	Relocated (f)	Relocated (%)	Non-relocated (f)	Non-relocated (%)	Total (f)	Total (%)	(x^2)
Sex							
Male	32	76.2	29	80.6	61	78.2	
Female	10	23.8	7	19.4	17	21.8	.219
Age[5]							
59 years or less	6	14.3	1	2.8	7	9.0	
60-64 years	6	14.3	10	27.8	16	20.5	
65-69 years	17	40.5	15	14.7	32	41.0	
70-74 years	10	23.8	7	19.4	17	21.8	
75-79 years	3	7.1	3	8.3	6	7.7	4.644
Religion[4]							
Presbyterian	8	19.0	5	13.9	13	16.7	
Anglican	18	42.9	17	47.2	35	44.9	
Roman Catholic	1	2.4	2	5.6	3	3.8	
Methodist	2	4.8	3	8.3	5	6.4	
Other	6	14.3	7	19.4	13	16.7	
No Religion	7	16.7	2	5.6	9	11.5	3.483
Marital Status							
Married	33	78.6	28	77.8	61	78.2	
Other	9	21.4	8	22.2	17	21.8	.007
Education[1,2]							
Up to Standard 6	10	23.8	11	31.4	21	27.3	
Secondary	18	42.9	19	54.3	37	48.0	
Tertiary	14	33.3	5	14.3	19	27.7	5.17
Income[3]							
Less than 10,000	24	64.9	23	65.7	47	65.3	
10,000 and more	13	35.1	12	34.3	25	34.7	.006

1. One case missing.

2. $x^2 = 5.17$, $p>.10$, 2 d.f.

3. Six cases missing.

4. "Roman Catholic", "Methodist" and "Other" grouped together to overcome problem of cells N<5.

5. "70-74" and "75-79" categories grouped together to overcome problem of cells N<5.

(Table 4.2.2), Anglicans constituted a larger proportion in the research sample, and Roman Catholics were considerably under-represented. There were only minor differences among the other religious groups.

Table 4.2.2 Comparison of research sample religious profession and usually resident Nelson population religious profession.

Religious Profession	Research Sample (%)	Nelson Population (%)
Presbyterian	16.67	15.3
Anglican	44.87	36.7
Roman Catholic	3.85	13.1
Methodist	6.41	6.4
Other	16.67	19.4
No Religion	11.54	9.1

By far the vast majority of the total sample was married (78.2%). There were too few widows, widowers, bachelors, spinsters and separated/divorced persons to examine them as discrete groups.

Education was the only variable where a moderate level of significance between the relocated and non-relocated groups emerged ($x^2 = 5.17$, $p>.10$, 2.d.f.). Although very similar with respect to schooling up to and including secondary level, between tertiary education for the two, the discrepancy is marked. Table 4.2.3 shows that education, not controlling for relocation, was also linked to the amount of planning done for retirement ($x^2 = 9.077$, $p>.02$, 1 d.f.). The most noticeable difference was seen in the tertiary educated group where only two out of the seventeen reported doing no planning.

Table 4.2.3 Level of education and its relationship with the amount of retirement planning.

Level of Education	Amount of Retirement Planning None (f)	Some (f)	Total (Σ)
Up to Standard 6	9	11	20
Secondary	20	16	36
Tertiary	2	15	17
Total	31	42	73

x^2 = 9.077, p>.02, 2 d.f. (5 cases missing)

4.2.2 Health Ailments

In the present analysis, no significant relationship was detected between the presence of health problems and the incidence of the stress-related physical symptoms. Twenty-seven respondents reported experiencing no health problems at all, 28 were suffering from one, 16 from two, five from three and two from four. The most common ailments were blood pressure and heart-related conditions (N=24), closely followed by arthritis or rheumatism (N=22). The category 'other', composed of a wide variety of complaints, amounted to twenty-two problems (Table 4.2.4).

Table 4.2.4 Health problems experienced by the research sample.

Health Problem	(n)	(%)
Heart/Blood pressure	24	21.8
Arthritis/Rheumatism	22	20.0
Respiratory	4	3.6
Sight	3	2.7
Endocrine	4	3.6
Deafness	4	3.6
Other	22	20.0
None	27	24.5
Total	110	99.8

Related to ailments, health as an important contributing factor in the reason for retiring emerged as a discriminating variable in the relocated - non-relocated relationship. A chi-square value of $x^2 = 8.07$ was obtained ($p>.01$, 1 d.f.). Thirty per cent of the relocated group (N=12) said that health was involved in the retirement decision, whereas only 5.6% (N=2) of the non-relocated sample indicated that health reasons were implicated (Table 4.2.5).

Table 4.2.5 The relationship between the role of health as an important factor in the decision to retire, and relocation status.

Relocation Status	Role of Health		
	No (f)	Yes (f)	(Σ)
Relocated	28	12	40
Non-relocated	34	2	36
Total	62	14	76

$x^2 = 7.48$, $p>.01$, 1 d.f. (2 cases missing)

4.2.3 Life Events[1]

The mean number of life events experienced by the respondents was 4.744 (variance = 7.206). The most common overall was going on holiday (N=56). The second most frequent event experienced was death of a close friend (N=33) followed by remodelling of home (N=27), and the change in the number of family gatherings (N=21). Broken down by effect, people on average experienced 1.436 negative events, the most common of these being the death of a close friend (N=18), a change in health due to illness and injury (N=14), and change in the health of a family member (N=10). The most frequently experienced positive effect events were taking a vacation (N=53), remodelling of the home (N=22), a change in the number of family

1. Appendix 3A contains a frequency table of life events by their effect.

gatherings (N=15) and making new friends (N=14). The mean number of positive events experienced was 2.0. The single most frequent neutral experience event to occur was death of a close friend. Table 4.2.6 presents the totals, means and variances for the life events schedule employed in this research.

Table 4.2.6 Totals, means and variances by life event effects.

Effect	Total	Mean ($\bar{x}$)	Variance
Negative	113	1.436	2.717
Neutral	101	1.308	2.086
Positive	156	2.000	2.130
Total	370	4.744	7.206

4.2.4 Social Support[2]

Six categories of social support were distinguished. No attempt was made to determine who provided various types of support, just the amount of support provided. Table 4.2.7 is a breakdown of the amount of support received by the six support categories and Table 4.2.8 indicates the level of support and the numbers of people receiving it by the number of support categories.

Table 4.2.7 indicates that few people experienced 'more than one' negative interactions (N=5). Social participation ranked highest with 56 people stating they had more than one person they interacted with regularly. Negative interactions aside, material aid and physical assistance were two areas where people most often lacked support.

2. No distinction was made between the "negative interactions" category and the other "positive" categories of support. To do so would be to assume that all negative contacts are 'bad' and all the others are in the best interests of the recipient.

Table 4.2.7 Social support categories by the level of interaction received.

Category of Support	Level of Interaction			Not Known
	No-one (f)	One (f)	More than One (f)	(f)
Private Feelings	2	38	26	12
Material Aid	9	20	33	16
Advice	4	11	47	16
Physical Assistance	8	18	45	7
Negative Interactions	54	10	5	9
Social Participation	3	5	56	14

Table 4.2.8 Number of support categories by the level of support received.

Number of Categories	Level of Interaction		
	No-one (f)	One (f)	More than One (f)
Zero*	59	21	6
One	14	34	14
Two	4	13	15
Three	-	8	19
Four	1	2	14
Five			10

* Includes missing values.

The 'private feelings' category ranked highest as the area where only one person was available or required to provide assistance, compared with any other support category at this level. No person received 'more than one' supporters over all the support categories. Table 4.2.8 shows that 10 people received support from 'more than one' for five categories of support.

At the other end of the support scale, one person had no-one to fill four of the support functions, and four people were deficient in two categories. Generally speaking, however, most of the sample had varying amounts of different types of support available to them.

4.3 SCALE COMPARISONS WITH SELECTED VARIABLES

Physical symptoms and social support were compared (using chi-square analysis) with relocation status, marital status, whether or not the respondent felt that he or she was healthy enough to do what they wanted, whether they were experiencing any health problems, and negative, positive, neutral and total life events experienced in the 12 months prior to the interview.

The physical symptoms checklist required the subjects to rate the frequencies of 22 items which they may have experienced during the previous four weeks. The response categories and the values used to rate the physical symptoms were; "never", one; "hardly ever", two; "sometimes", three; "often", four; and "very often", five. The scoring was reversed for the three "positive" items (e.g. "enjoying life in general", "enjoyed seeing friends", and "felt really good"). The physical symptoms scale was created by summing the scores of the responses to the physical symptoms checklist (excluding the "positive" items) and dividing the sum by N. The resulting mean scores were assigned to a "low", "medium" or "high" category. Table 4.3.1 lists the categories, their theoretical range of values and the physical symptom scale frequencies. The "high" category contained only one score, so it was combined with the "medium" category for further analyses.

Table 4.3.1 Value ranges and frequencies for the physical symptoms.

Value Range	Category	n	(%)
1 - 1.5	Low	52	67.53
>1.5 - 3.5	Medium	24	31.17
>3.5 - 5.0	High	1	1.30
Total		77	100.00

One missing case.

The social support scale was developed using a similar procedure. The mean score, however, was then multiplied by the number of support categories (N=6) to obtain a total social support score. These scores were then assigned to one of four categories; "low", "low-medium", "medium-high", and "high". Four categories (as opposed to three for the physical symptoms scale) were used because the small number of factors (N=6, cf. N=19 physical items) meant that a score was more sensitive to variations in the combinations of values used to measure support. The absence of a value would have a similar affect (values used to measure the support factors were, "no-one", one; "one person", two; and "more than one person", three). Few scores fell in the "low" (N=2) and "low-medium" (N=7) categories so the two were combined.

Table 4.3.2 Value ranges and frequencies for the social support scale.

Value Range	Category	n	(%)
6 - 8.5	Low	2	2.67
>9.5 - 11.5	Low-Medium	7	9.33
>12.5 - 14.5	Medium-High	35	46.67
>15.5 - 18	High	31	41.33
Total		75	100.00

Three missing cases.

In an effort to further investigate the existence of significant relationships, the total support score mean, $\bar{x}$ = 13.75 (N=75), was used to split the support scores into two groups; those lying above the mean and those lying below the mean. The chi-square values for those comparisons are presented in Table 4.3.3. As each life events group covered a wide range of values and contained a large number of cells with less than five responses, comparing the two scales with the life events on a frequency basis was not possible. To overcome the problem, the mean was determined for each major class of life events (i.e. negative, positive, neutral, total), reducing the scores to manageable categories. No significant difference between those who had relocated and those who had not relocated was detected on either the stress symptoms scale or the two social support measures. Because of this, and the limitations of a small-sized sample, no further analyses were conducted using relocation as the control variable.

Table 4.3.3 Chi-square values of selected variables with social support and stress symptoms.

Variables	Stress Symptoms (L, M/H Groups)	Social Support (L/L-M, M-H, H Groups)	Social Support ($\bar{x}$ split)
Relocation Status	.117	1.396	.60
Marital Status	1.45	4.31	5.063*
Healthy to do...	9.41**	.262	.287
Health problems present	.77	2.076	2.064
Life Events:			
Negative	5.34*	2.72	.263
Positive	.008	.479	.001
Neutral	.015	9.553**	3.84*
Total	.12	3.19	.016

* $p<.05$

** $p<.01$

Although it is not directly related to the relocated - non-relocated issue, a brief reference will be made to the small number of differences that occurred within the combined sample.

Chi-square values of comparisons which related stress symptoms to feeling healthy enough to do what one wants ($x^2 = 9.41$, $p<.01$, 1 d.f.) and negative life events ($x^2 = 5.34$, $p<.05$, 1 d.f.) were significant (Table 4.3.3). A closer look shows that for "healthy to do" (Table 4.3.4), respondents scoring medium or high on the stress symptoms scale were more likely to report they were not able to do as much as they wished. This suggests that the presence of physical symptoms, those listed in the checklist, and their rate of occurrence in some way limits the level of activity desired by the individual. High scorers on the stress symptoms scale also experienced a greater number of negative life events when compared with the people experiencing negative life events and who scored low on the stress symptoms scale (Table 4.3.5). The nature of this relationship is more complex in that evidence of physical symptomatology may be a cause as well as an effect of exposure to life events which have negative components.

Table 4.3.4 Relationships between feeling healthy enough to do as one wants and stress symptoms.

Stress Symptoms	Healthy to do		
	No (f)	Yes (f)	(Σ)
Low	9	41	50
Medium/High	13	12	25
Total	22	53	75

$x^2 = 9.41$, $p<.01$, 1 d.f. (Three missing cases)

Table 4.3.5 Relationships between negative life events and stress symptoms.

Stress Symptoms	Negative Life Events		
	$< \bar{x}$ Scale Score (f)	$> \bar{x}$ Scale Score (f)	(Σ)
Low	37	15	52
Medium/High	11	14	25
Total	48	29	77

$x^2 = 5.34$, $p<.05$, 1 d.f. (One missing case)

Only one significant chi-square value was achieved using the scale developed for social support. A greater proportion of low and medium-high scoring individuals (Table 4.3.6) experienced less than the average number of neutral life events ($x^2 = 9.553$, $p<.01$, 2 d.f.) compared with high social support scorers. This relationship was significant also for the mean-based social support variable, although the chi-square ($x^2 = 3.54$, $p<.05$, 1 d.f.) value was lower (Table 4.3.7).

Table 4.3.6 Relationships between neutral life events and social support.

Social Support	Neutral Life Events		
	$< \bar{x}$ Scale Score (f)	$> \bar{x}$ Scale Score (f)	(Σ)
Low/Medium-Low	8	1	9
Medium-High	32	3	35
High	19	12	31
Total	59	16	75

$x^2 = 9.553$, $p<.01$, 2 d.f. (Three missing cases)

Table 4.3.7 Relationships between neutral life events and mean-based social support.

Social Support	Neutral Life Events		
	$< \bar{x}$ Scale Score (f)	$> \bar{x}$ Scale Score (f)	(Σ)
$< \bar{x}$	31	4	35
$> \bar{x}$	28	12	40
Total	59	16	75

$x^2 = 3.54$, $p<.05$, 1 d.f. (Three missing cases)

The remaining significant chi-square value, $x^2 = 5.063$ ($p<.05$, 1 d.f.) was obtained from the comparison of the mean-based social support variable with marital status. Table 4.3.8 shows the respondents falling in the "other" category (widowed, separated, single) received relatively less social support than did married subjects. The difference between the high scoring "married" and "other" categories is quite marked. This suggests that being married provides more opportunity for support.

Table 4.3.8 Marital status and its relationship with social support.

Social Support	Marital Status		
	Married (f)	Other (f)	(Σ)
$< \bar{x}$ Scale Score	23	12	35
$> \bar{x}$ Scale Score	35	5	40
Total	58	17	75

$x^2 = 5.063$, $p<.05$, 1 d.f. (Three missing cases)

Chi-square analyses comparing stress symptoms with both social support variables did not achieve any significant values (Table 4.3.9). When a negative interaction - no negative interaction dichotomy was used,

Table 4.3.9 Chi-square values of life events, stress symptoms, social support and relocation, in various combinations.

	Stress Symptoms	Social Support (Groups) Low/ Medium	Medium-High	High	
Comparison of Stress Symptoms with Social Support (Groups).	Low	7	24	19	x^2=.964
	Medium/High	2	11	12	

	Stress Symptoms	Social Support (Mean Split) $<\bar{x}$ Scale Score	$>\bar{x}$ Scale Score	
Comparison of Stress Symptoms with Social Support (Mean Split).	Low	26	25	x^2=1.191
	Medium/High	9	15	

	Life Events (Negative)	Social Support (Negative Interactions) Yes	No	
Comparison of Social Support (Negative Interactions) with Life Events Groups.	$<\bar{x}$No.of Events	5	38	x^2=6.346*
	$>\bar{x}$No.of Events	10	17	
	Life Events (Positive)			
	$<\bar{x}$No. of Events	8	32	x^2=1.113
	$>\bar{x}$No. of Events	7	23	
	Life Events (Neutral)			
	$<\bar{x}$No. of Events	10	44	x^2=1.186
	$>\bar{x}$No. of Events	5	11	
	Life Events (Total)			
	$<\bar{x}$No. of Events	6	29	x^2=.764
	$>\bar{x}$No. of Events	9	26	

	Stress Symptoms	Social Support (Negative Interactions) Yes	No	
Comparison of Social Support (Negative Interactions) with Stress Symptoms.	Low	6	42	x^2=7.233**
	Medium/High	9	13	

Table 4.3.9 (Continued)

	Life Events	Relocation Status Relocated	Non-Relocated	
Comparison of Relocation Status with Life Events	Negative	59	54	
	Positive	86	70	
	Neutral	45	56	$x^2=2.794$

* $p<.05$, 1 d.f.

** $p<.01$, 1 d.f.

however, significant differences were found in the association of the social support variable with the negative life events class, and with the stress symptoms scale.

A significant chi-square value, $x^2 = 6.346$ ($p<.05$, 1 d.f.) was obtained from the comparison of the negative life events group with the social support (negative interaction) variable. This indicated that a proportionally greater number of people who experienced more than the average number of negative life events reported negative interactions than those who reported negative interactions and who experienced less than the average number of negative life events(Table 4.3.9).

The stress symptoms comparison with the social support (negative interactions) variable also yielded a significant chi-square value of $x^2 = 7.233$ ($p<.01$, 1 d.f.). People with a medium (high stress symptoms) score reported significantly more negative interactions than people with a low stress symptoms score (Table 4.3.9).

4.4 THE RELOCATION SUBSAMPLE PROFILE

4.4.1 The Pre-Move Physical Situation

The majority of relocatees (n=36, 85.7%) moved from a residence they owned, 34 having resided in a house and only two previously living in a flat. Three (7%) of the subsample moved from accommodation they had been renting and the remaining three from some other accommodation arrangement. Thirty-two (76.2%) of the respondents' residences had been sited on a section, two moved from a farm and four from a farmlet.

The previous moving history of the relocated sample presented quite an interesting picture. The start of married life, or adult working life for those who had not married or married late, was taken as the basemark. Two people had spent all their married life in the same residence, the move to their present residence being the first, one person had moved 20 times in the past and another 22 times. Twelve people (28.6%)

had moved two or fewer times previously, 10 of the respondents (23.8%) had moved three to five times, nine (21.4%) had moved from six to eight times and the remaining 23.9% (n=10) relocated on nine to twenty-two previous occasions (Table 4.4.1). The longest period spent in any one residence was 50 years (n=1). Nine relocatees had lived for 30 years or more in the same residence, and two of the subsample had spent a maximum of only four years in any one residence. The mean for the longest time spent in one residence was 20.79 years.

Table 4.4.1 Moves made in the past excluding the last move.

n (moves)	n (people)	% (people)	Cumulative % (people)
⩽ 2	12	28.6	28.6
3-5	10	23.8	52.4
6-8	9	21.4	73.8
9-22	10	23.8	97.6
Not ascertained	1	2.4	
Total	42	100.0	100.0

$\bar{x}$ = 5.9

Figure 4.4.1 clearly illustrates a relationship between distance and relocation. Thirteen (30.95%) of the subsample moved from somewhere within the Nelson Province. Apart from Marlborough (N=4, 9.52%) the next highest numbers came from the closest provinces, with the numbers falling as distances increased. Wellington and Canterbury accounted for six persons each (28.58%), Otago four relocatees (9.52%), Southern Auckland and Otago three people each (14.28%) and Central Auckland one individual (2.38%).

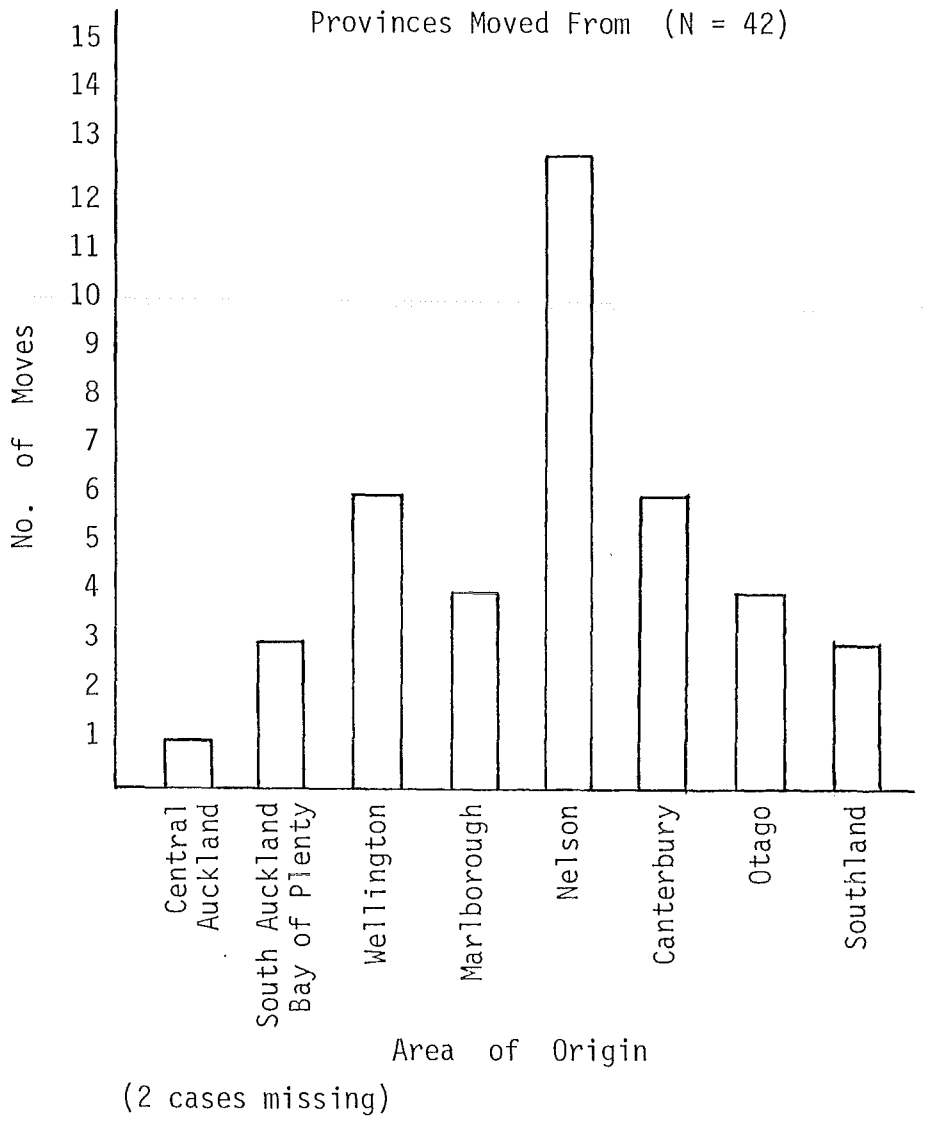

Figure 4.4.1 Relationship of distance moved to number of relocatees.

4.4.2 The Post-Move Physical Situation

Thirty relocatees (71%) moved into a house and the remaining 12 (29%) moved into some type of semi-detached residence (townhouse, flat etc.). Table 4.4.2 shows the relationship between pre-move - post-move accommodation types. Twenty-nine per cent (N=10) of people who had previously lived in their own house moved into a type of flat.

Table 4.4.2 Pre-move - post-move accommodation relationships.

Current Residence	Previous Residence: Rented House (f)	Rented Flat (f)	Own House (f)	Own Flat (f)	Other (f)	(Σ)
House	1	1	24	1	3	30
Flat	0	1	10	1	0	12
Totals	1	2	34	2	3	42

Comparing past and present residences, 15 relocatees (35.7%) considered their new home was better and the same number (N=15) felt that while some aspects were an improvement, others were not. Six respondents (14.3%) reported their present place was worse and only two (4.8%) considered it was much the same. Twenty-four relocatees (57%) had to sell or dispose of some furniture or possessions, the most often cited reason for having to do so being lack of space (45.83%).

The relocatees were asked to rate various aspects of their accommodation and location on a scale ranging from 'very satisfied' to 'very dissatisfied'. An accommodation satisfaction index was developed by summing the ratings for each item and dividing it by the number of items. A score of five was the maximum obtainable, and one the minimum. Table 4.4.3 shows the score range for each satisfaction rating. All the respondents were, overall, either satisfied (N=14, 34.1%) or very satisfied (N=27, 65.9%) with their accommodation. Only three items,

Table 4.4.3 Score ranges for accommodation satisfaction ratings.

Score Range	Rating	(n)	(%)
1	Very dissatisfied		
> 1-2	Dissatisfied		
> 2-3	Neither satisfied nor dissatisfied		
> 3-4	Satisfied	14	34.1
> 4-5	Very satisfied	37	65.9
Total		41	100.0

(One case missing)

access to facilities, section/garden, and access to residence received a very dissatisfied rating - one each. The maintenance factor was the only one not to yield a 'dissatisfied' or 'very dissatisfied' rating, and the amount or arrangement of space item received more 'very satisfied' ratings than any other (N=24, 57.14%). Thirty relocatees (71.43%) found it either 'easy' or 'very easy' to meet new people and only two (4.76%) expressed difficulty. For those who had no problems, the neighbourhood was the area in which most new contacts were made (18) followed by miscellaneous activities, other clubs and organisations, sporting clubs and organisations, church, service clubs and, lastly, the family (13, 11, 7, 6, 4 and 1 responses respectively).

Overall, few problems and disappointments associated with the relocation were reported. Fifteen people (36%) experienced none at all. Loss of social ties, loss of a familiar environment and health (N=9, 7 and 5) were the main sources of upset. A number of respondents (N=14) found things different to what they thought they would be. These included climate, pace of life and traffic behaviour.

4.4.3 Decision-Making

Seventy-four per cent (N=31) made the decision to move after they had retired. Table 4.4.4 lists the reasons involved in order of their priority. As the main reason, the desire to move closer to family (N=14) was most important, followed closely by climate and topography (N=12). Current needs, the third most important main reason was well behind with only six responses. Overall however, climate and topography emerged as the most important reason for moving to, or within, Nelson (N=23, 54.76%). This was followed by the desire to "move closer to family" (N=16, 38.1%), and the need to find something more suitable for current needs (N=11, 26.19%). The 'other' category also claimed 11 responses. Among the factors mentioned here were two cases of marriage break-up prompting a move, two cases of wishing to move closer to the Marlborough Sounds or Golden Bay, and a desire to get away from racial problems.

Table 4.4.4 Breakdown of reasons involved in the decision to move.

Reasons	Order of Importance First	Second	Third	Overall Importance
Current needs	6	1	4	11 (26.19%)
Cheaper to maintain	0	3	1	4 (9.52%)
Leave a deteriorating neighbourhood	2	1	0	3 (7.14%)
Closer to friends	1	1	0	2 (4.76%)
Closer to family	14	2	0	16 (38.1%)
Better community facilities	1	2	1	4 (9.52%)
Climate and topography	12	10	1	23 (54.76%)
Desire to return to an area where before had lived	1	2	1	4 (9.52%)
Other economic considerations	0	1	0	1 (2.38%)
Health	2	2	5	9 (21.43%)
Small town atmosphere	0	0	1	1 (2.38%)
Other	3	5	3	11 (26.19%)

4.4.4 Perceptions of the Current Situation

Thirty-eight people (90%) reported having adjusted either reasonably well or very well to living in their present situation. Only one person felt a poor adjustment had been made. Three relocatees felt they had not been accepted by the community and four did not know. In response to a question of fulfilment of hopes and expectations 32 people (71%) felt they had achieved what they wanted, five (12%) said they had not and a further five did not know. Asked whether or not, given the opportunity, they would do the same thing again as far as the move was concerned 30 (71%) said they would and six (14.3%) said that they would not. Twenty-six (61.9%) of the subsample indicated they had no plans for further moves, whereas nine (19%) of respondents felt that at some time they would have to relocate again. Reasons given for having to do so fell into three major groups; health, access and wanting to move closer to family.

A disappointments/problems index was created by selecting from those who had experienced problems, people who had reported more than the average (tend high) number, and those who reported fewer than average (tend low). Cross-tabulated with anticipating a move in the future (Table 4.4.5) none of the three who fell into the 'tend high' group were certain of remaining where they were. (Because the individual cells do not meet the minimum requirement, N=5, use of the chi-square is inappropriate.)

Table 4.4.5 The relationship between disappointments and problems, and anticipating a move in the future.

Disappointments/ Problems	Anticipating a Move			
	No (f)	Yes (f)	Don't know (f)	(Σ)
Tend low	14	4	1	19
Tend high		2	1	3
Totals	14	6	2	22

4.5 FOLLOW-UP RESULTS[3]

Table 4.5.1 presents a summary of the results of a telephone follow-up carried out in February 1986. Two pieces of information were sought from the research sample; whether or not they were still living in the same residence, and whether they had worked at any stage in the intervening period.

Table 4.5.1 Summary results of a telephone follow-up in February 1986.

Follow-up Variable	Relocation Status: Relocated (f)	Relocated (%)	Non-Relocated (f)	Non-Relocated (%)	Mean (%)
Contacted	26	61.9	23	63.89	62.82
Not Contacted	12	28.57	10	27.78	28.21
Died	1	2.38	3	8.30	5.13
Moved	3	7.14	0	0.0	3.85
Total	42	99.99	36	99.97	100.01

Two of the relocated subsample and one member of the non-relocated subsample had been or were still involved in doing something for which they received financial reward. Three members of the relocated group had moved again; one to another part of Nelson City (because of a mobility problem), one to Christchurch, and the third person was unable to be traced. Another member of the relocated subsample was planning to move to Christchurch in March or April. No one in the non-relocated subsample had moved.

3. The Electoral Rolls were consulted to detect any change of address, change of "occupation" or absence of a name.

CHAPTER 5

DISCUSSION

The major aim of this project was to collect data that would shed light on a number of the factors involved in relocation. A further aim was to assess the stressfulness of the impact of relocation by comparing a group of relocated retired with a group of non-relocated retired on key variables such as social support and symptomatology. The results are discussed in the same order as they were presented in the results section. The general and relocation sections are brief, due mainly to a lack of appropriate comparative literature. A longer discussion is conducted for the scale comparisons.

5.1 DISCUSSION OF THE GENERAL SAMPLE CHARACTERISTICS

The relocation status of the sample was compared on the demographic variables of sex, age, religion, marital status, education and income. The two subsamples were very similar on most of these factors, the only significant difference occurring in the education variable. There is no clear consensus in the literature on the influence of education. Eisdorfer and Wilkie (1977) reported that older movers tended to be less well educated. Atchley (1976) differentiated long distance movers, (saying they intended to be more highly educated) from short distance movers (who tended to be less well educated). It could be that people relocating to Nelson resembled Atchley's description because they had moved over longer distances. There was some variation on the age variable, six of the relocated subsample were aged 59 years or less, as opposed to the one non-relocated individual, but this was

not significant overall. It is possible that health, a significant factor in the decision to retire, may have been implicated in the early retirement of some of the relocatees. The small sample size, however, prevented any valid conclusions being drawn from a further breakdown of subgroups. There was a slight tendency for more of the relocated subsample to declare no religious affiliation, seven people as opposed to two, but overall this was not significant. A comparison with the general Nelson population indicated that Roman Catholics were somewhat under-represented in the research sample, and Anglicans were over-represented. There was no significant difference between relocation status and the amount of retirement planning done, but there was between education and planning. With a larger sample, a further breakdown using relocation status could have yielded some interesting results, especially in view of the significant difference on the education-relocation comparison. The discriminating factor for both appeared to be related to whether or not one had received a tertiary education. The only other significant relationship was between the role of health as an important factor in the decision to retire and relocation status. The relocated retired were more likely to report health being implicated, compared with the non-relocated sample. This could in turn be related to the larger proportion of younger retired (aged under 60) in the sample. A look at the breakdown of reasons involved in the decision to move indicates that, although it was the third most important reason, overall it only rated fifth. This suggests that it was more important in the retirement decision than the relocation decision, but it was related to both.

5.2 DISCUSSION OF SCALE COMPARISONS WITH SELECTED VARIABLES

Chi-square analyses revealed no significant relationships between relocation status and the stress symptoms and social support scales.

A comparison of life events and relocation status for significant differences also failed to yield any findings of consequence. The apparent lack of significant differences between these groups was somewhat disappointing from the researcher's point of view, but favourable with respect to the individuals concerned. One of the major problems associated with the analyses were the very low numbers of "high" scorers(n=1) on the physical symptoms scale, and "low" and "medium-low" scorers (n=2,7) on the social support scale. It is very difficult to test for a relationship when data do not adequately cover the range of values. A larger sized sample would have increased the probability of including people who fell at the extreme ends of the range, and would have gone some way toward solving the comparison problem. The net result, however, would not necessarily produce results of significance. The reality of the situation could be that, on the variables measured, the relocated and non-relocated groups are more similar than they are dissimilar.

A paper which came into the hands of the researcher some time after the main part of the project was completed, provided a more suitable reference than the majority of papers discussed in the literature review. In a departure from the usual planned retirement community type study, Hendrick, Wells and Faletti (1982) focused on two groups; retired people who had moved to South Florida after retirement, and people who had been long-term residents there before their retirement. Their approach, therefore, was similar to the one used in this study. They suggested that relocation effects could be divided into two time periods; an initial stressful period lasting anywhere from six to eighteen months, and a much longer second stage, where the whole environment is assessed on factors that combine over time to create a relative like or dislike comparison with the previous situation. The major purpose of their study was to investigate the social and emotional effects of relocation

on elderly reitred persons in the second stage of relocation. A 2 x 2 factorial design was utilised; relocated retirement housing, relocated-regular housing, non-relocated retirement housing, non-relocated regular housing. The sample consisted of 314 respondents who had been retired for between 18 and 120 months. The results were organised in terms of three major issues; how do relocated retirees differ from non-relocated retirees; does relocation interact with type of housing to affect alienation and adjustment; and can alienation in retirement be predicted (or classified) from a collection of relevant life variables. A comparison of relocated versus non-relocated respondent characteristics revealed that the groups were similar on most demographic variables, with the exception of marital status and immigration class. Overall, factors measured that were common to the present study (i.e., life satisfaction, current health) revealed similar patterns. Hendrick et.al. concluded that "In view of the relatively high contentment with retirement...it seems safe to conclude that relocation per se has very few negative consequences (p.961)". The same could be said for the present study.

In view of the minimal amount of significant differences discovered (i.e. education, retirement decision and health) between the relocated and non-relocated subsamples the focus was shifted to determine whether or not any within sample differences existed on the physical symptoms and social support scales. This proved to be more fruitful.

Comparison of the physical symptoms scale with feeling healthy enough to do what one wants and negative life events yielded significant values. The relationship between the experiencing of physical symptoms and being healthy enough to do as one wants suggests that the incidence and frequency of symptoms listed in the checklist in some way limits the individual in terms of the activities she or he desires to perform.

It can be supposed that higher levels of symptomatology impair the ability of an individual to do the things she or he wishes to do. Cockerham, Sharp and Wilcox (1983), in a recent review of literature on aging and perceived health status, reported the findings of a number of investigations showing that self ratings of health among elderly adults are valid measures of the respondents health status. The number of symptoms experienced was the strongest predictor of perceived health status. The better educated elderly, reporting the fewest symptoms, were more likely to perceive their health in a more positive light than younger adults.

Negative life events was the other variable that yielded a significant difference when compared with physical symptoms. A further look at Table 4.3.3 reveals that positive life events had the lowest value with neutral and total event values being very similar. Originally, it had not been intended that the life events section be used to predict symtomatology. The patterns that emerged, however, were consistent with reports in the literature. Langer (in Ross & Mirowsky, 1979) observed that undesirable events predict symptomatology better than desirable events and desirable events alone are the worst predictors of symtomatology whether measured by the Gurin or Langer scales. Mirowsky and Ross (1979) used a summation of undesirable events as a comparison measure to two indices of change, because it predicted equally as well as any other traditional undesirability measure, to assess which best predicted symptomatology. They found that the simple undesirability index correlated more highly with symptomatolgy than either of the two subjective change indices, suggesting that it is the undesirability of life events that is associated with increased psychiatric symptomatology. Dohrenwend (1973) also found that undesirability was highly correlated with symtomatology, although a life change measure was the most highly correlated. Neither neutral, positive or total life events

predicted symptomatology, so the findings of the present project, that the experiencing of a greater number of negative life events was associated with increased symptomatology, are supported in the literature. A number of authors, classifying life events in terms of specific dimensions (e.g. Horowitz et al, 1974; Chiriboga and Dean, 1977), found that the direction of association with adjustment criteria varies. This suggests that a combined single score, such as that used here, is somewhat weaker in predicting outcomes, than scores based on dimensions, which may be more indicative of the strength of association with change that potentially exists. Further analysis using dimensions could well yield a more valuable set of results.

Three significant values were obtained from comparison of the social support scales with neutral life events and marital status. Neutral life events were significantly related to both social support measures; the groups split yielding a higher chi-square value than the mean split. A comparison of Tables 4.3.6 and 4.3.7 suggests that extreme values of social support differentiate better than using a mean split, particularly with respect to those scoring below the mean on neutral life events. The social support score is based on the size of one's network, rather than the quality. It seems logical to assume that the larger the size of one's network, the more opportunity there is for contact and, therefore, exposure to or experiencing of different life events. The reverse may also be true; the more one does, the greater the likelihood of others being involved. This is not necessarily so, however, because the same sort of argument could be used with the other life event categories. A closer look at the events, roughly separating them into people oriented and non-people oriented, indicates that positive events (percentage wise) are very much non-person oriented. The difference between neutral and negative life events is not nearly so clear. The use of factor analysis or dimensions to further

investigate this relationship would possibly produce a clearer picture of the factors involved and, therefore, provide a better basis for interpretation.

The relationship between marital status and social support is supported by the literature. The "other" category contains widows/ widowers, separated, divorced and single people. Longino and Upman (1982) found that more emotional, social and instrumental support was received from family members by women who still were or had been married. Married women received the most support and unmarried men the least. The greatest informal resource deficits were found among spouseless men. A point that does not emerge from the results, but was observed during the course of interviewing relates to the provider of support. The ASSIS asks the respondent to name a person who may be important for fulfilling some role. In a number of cases (not recorded) respondents named organisations, rather than individuals. This was so particularly for advice. The design in wording of the schedule makes it difficult to incorporate an organisation, rather than a person, in the scoring scheme. Although informal support systems are very important, where these are seriously deficient (as in spouseless men), support at a more formal level should be able to be recognised.

The use of the negative interactions category of social support yielded some interesting information. Both negative life events and stress symptoms were significantly related to negative interations. A look at the incidence and frequency of negative life events (Appendix 3A) suggests that a high percentage of responses involved people experiences (relative to negative event non-people experiences). Particular types of events could be associated with people scoring high on both negative interactions and negative life events. The present level of analysis is unable to establish what the discriminating factors are; it could be that for people with personality types that

tend to clash with others, their experience or perception of an event or interaction is more negative compared with less highly strung types. A more detailed analysis, based on clusters or dimensions of events may go some way toward revealing discriminating patterns. Stress symptoms were also strongly related to negative interactions. The relationships here are even less clear. Do people perceive interaction in an unfavourable light because they are unwell and less able to cope, possibly being more easily upset if the situation is unpleasant or demanding? Alternatively, is exposure to a high level of negative interactions detrimental to coping ability, particularly when combined with deficits of support in other categories? It is unlikely that any of these explanations cover the range of possible reasons for the relationships observed. Only through further analysis will some insight be gained into the factors involved and processes at work.

5.3 DISCUSSION OF THE RELOCATION SUBSAMPLE PROFILE

The main intention of the study was to identify and describe some of the factors involved in the relocation of the retired, rather than relate them to any specific model. The function of this investigation, in a sense, was to provide some base data on which somebody else could build. The preceding discussions have revealed that little, if any, difference exists between the relocated and non-relocated subsamples on the variables measured. Chapter 4.4 is reasonably self-explanatory, much of the data is of the frequency type, illustrating the situation as it was observed at the time, but going no further.

All of the respondents were either satisfied or very satisfied with their accommodation. The majority of people expressed high levels of adjustment to their new environment, and had fulfilled their hopes and expectations. A little over half of the sample had experienced some problems or disappointments. There was a tendency for those who

had experienced a greater number of problems to be either contemplating or uncertain about future relocation. The numbers involved, however, were very few. The overall impression conveyed was one of general contentment with the new environment.

There is considerable variation between the most important reasons given for moving in this study, and the reasons reported in Age Concern (1978) and Atchley (1976). This illustrates that people who relocate are motivated by different needs or desires. The patterns found in Nelson, among retirees, are going to be quite different to those found in Wellington, or, for arguments sake, those found among younger working adults moving to Nelson.

As with the discussion of scale comparisons, the very low level of scorers at the less desirable ends of variables used in this section meant that comparisons between satisfaction factors and disappointments and problems were impractical. The small subsample (N=42) was a definite disadvantage when analysing results. The general trends that have emerged, however, should be reasonably indicative of the situation as it is experienced by the majority of home-owner relocating retirees.

5.4 LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

The apparent lack of difference between the relocated and non-relocated subsamples resulted in a shift in focus from between group comparisons to within group comparisons. This yielded a more satisfactory level of results and suggested that there was more variability within, rather than between, the two groups.

A major limitation of the study, particularly in terms of analysis, was the small sample size. A larger sample size would, hopefully, have produced a wide enough range of values to enable valid comparisons of variables, and the breakdown of variables into subgroups. The types of analyses used here were basic; frequencies and chi-square analyses

(Kolmogorov-Smirnov and Mann-Whitney were utilised but produced nothing significant). Factor analysis and partial correlation techniques assessing the relative contributions of factors such as health, retirement planning, and life satisfaction, and determining the clustering of life events, and their relationships with symptomatology, would increase the value of information obtained.

Initially, time constraints limited this study to a cross-sectional design. The longer than anticipated conclusion of this project, however, enabled a follow-up study to be performed approximately two and a half years after the original interviewing. If this could have been forseen, an effort would have been made to cross-reference the surveys with the respondents so that comparisons could have been made on some of the key variables (e.g. social support, symptomatology). Ideally, a longitudinal design which follows a group of retirees (or even pre-retirees), noting who moves, where they move and why they move should be utilised. Control groups in other cities could also be included to provide further points of reference. All approaches have their advantages and disadvantages.

Relocation is so often studied outside the context of other events, i.e. retirement. Chevan and Fisher (1979) suggested that relocation was a consequence of both the individuals detachment from the labour force and the adjustments that have to be made to a retirement lifestyle; the home and living arrangements assume a new importance. Disruption to jobs and career opportunities is avoided by leaving relocation until after retirement. Interruption to community attachments may also be reduced, particularly if the retiree is decreasing his or her involvement in favour of a less demanding lifestyle. It would be fair comment, however, that many people believed they were busier in their retirement than they had ever been while working. As far as arranging convenient interview times was concerned, it was

quite a juggle for some to fit one in between such activities as golf, bowls, meetings of one community group or another, and firewood collecting.

Another problem associated with the present study was the inclusion of too many variables. This was done to try and create a composite picture, and to overcome the problem of treating relocation as an isolated event. The life events measure was used to determine if stress could be attributed to factors other than relocation. As a tool it would be even more useful if a temporal dimension was added, and events were clustered according to certain dimensions. The absence of high levels of stress meant that the study of social support, as a buffer, was not possible. Larger samples and a more complex analysis could go some way toward solving this problem.

It is a belief of the researcher that a contributing factor to the overall positive situation of most of the respondents was the character of Nelson, both city and province. The areas central geographical location (being equidistant from both ends of New Zealand), the temperate climate, and the comprehensive range of organisations and services (particularly the type sought after and used by "older" people), are major attractions to people contemplating a move.

CHAPTER 6

CONCLUSION

The present study has investigated a variety of factors involved in the relocation of the retired. The results suggested that the majority of relocated individuals were satisfied with their new environment and overall situation at the time of the interview. Comparisons were made between the relocated and non-relocated groups on a range of variables. Only two significant differences were established. A greater amount of variability was found within the samples.

In the literature review, a certain amount of criticism had been aimed at the methodological limitations of previous relocation investigations. Unfortunately, little progress towards remedying the situation was made in the present project. Attempts to determine whether alternative sources of stress, other than relocation, were responsible for higher levels of reported stress symptoms were thwarted by a distinct lack of scorers at the higher end of the physical symptoms scale. This also severely affected a study of the role of social support as a buffer.

The identification of a greater within sample variation suggests that the retired population could well benefit from further research to determine whether distinctions could be made on factors other than relocation (level of activity). On the subject of between group differences, however, a similar study on relocation conducted in another centre could well yield a different pattern of results. It is vitally important for future planning that the perceptions, desires and outcomes of the relocated retired are both considered and accurately assessed.

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APPENDIX 1A

THE SAMPLE

Overall total of potential subjects (occupation stated as "retired") gathered from the 1979 General Electoral Roll (t1 and t3).	402

The above figure, using the 1978 General Electoral Roll, represents the status of 'potential' subjects in 1978. It was broken down as follows:

Group (i)	- occupation stated as "retired", "widow", "widower", "superannuitant", "pensioner", "housewife" etc.	186
Group (ii)	- occupation stated as any title relating to paid employment (does not include members of Group (i), "unemployed", "beneficiary", "mother" etc.).	110
Group (iii)	- name not recorded on the 1978 General Electoral Roll	106
	Subtotal 1	402

- -

Overall total of potential subjects (occupation stated as "retired", and a ratepayer) gathered from the Local Body Electoral Roll updates, 1983 (t2 and t4). Include with Group (iii)	42
Subtotal 2	444

- -

Group (i) were discarded because:

(a) they were not necessarily recently retired	
(b) they contained occupations other than "retired"	-186
Workable Total After First Screening	258

APPENDIX 1B

Situation after initial phone contacts - Group (iii) 'Relocated'

Sampling: t1 Source: General Electoral Roll

Died	5
Moved Again	8
Changed to Maori Roll	1
No Phone Number	10
Name Recorded Twice	2
Unsuitable/Unwilling to be Interviewed	26
Willing to be Interviewed	27
Subtotal	79

t2 Source: Local Body Electoral Roll

No Phone Number	3
Unsuitable/Unwilling to be Interviewed	8
Willing to be Interviewed	7
Subtotal	18

t3 Source: General Electoral Roll

No Phone Number	2
Name previously recorded or overlooked	2
Name not appearing on later rolls	2
Unsuitable/Unwilling to be Interviewed	14
Willing to be Interviewed	7
Subtotal	27

t4 Source: Local Body Electoral Roll

No Phone Number	6
Unsuitable/Unwilling to be Interviewed	6
Willing to be Interviewed	12
Subtotal	24
Overall Total	148

Overall Total Willing to be Interviewed 53

APPENDIX 1B (Continued)

Unwilling/Unsuitable broken down - Group (iii) 'Relocated'

t1	-	deafness; unable to communicate intent of phone call	1
	-	length of time since move too long	2
	-	reason not noted	23
		Subtotal	26
t2	-	too busy	1
	-	refused; did not feel retired	1
	-	reason not noted	6
		Subtotal	8
t3	-	length of time since move too long	1
	-	renting	1
	-	refused	5
	-	away on holiday	1
	-	reason not noted	6
		Subtotal	14
t4	-	not resident in Nelson (ratepayer only)	1
	-	refused	1
	-	away on holiday	1
	-	not retired	1
	-	reason not noted	2
		Subtotal	6

APPENDIX 1C

Situation after initial phone contacts - Group (ii) 'Non-Relocated'

Sampling: t1 Source: General Electoral Roll

- Died	1
- No phone number	5
- Requirements not met on later rolls	2
- Unsuitable/unwilling to be interviewed	38
- Willing to be interviewed	32
Subtotal	78

t2 Source: General Electoral Roll

- Wrong phone number	1
- Unsuitable/unwilling to be interviewed	16
- Willing to be interviewed	15
Subtotal	32
Overall Total	110

Overall Total Willing to be Interviewed - 48

Unwilling/Unsuitable broken down - Group (ii) 'Non-Relocated'

t1	- did not meet retirement requirements	2
	- refused, family problems	1
	- reason not noted	35
	Subtotal	38
t2	- not retired	1
	- away on holiday	2
	- did not fit criteria for non-relocated	1
	- renting	2
	- refused	4
	- reason not noted	6
	Subtotal	16

APPENDIX 1D

Total Relocated Initially Willing	53	
Total Non-relocated Initially Willing	48	
Total Interviews Arranged	84	
Change of Mind/Unable to be Contacted	17	
Relocation	42	(79% Willing)
Non-relocation	36	(75% Willing)
Unusable	6	
Unusable Broken Down:		
- did not meet criteria	4	
- dropped out for personal reasons	2	

APPENDIX 2A

RELOCATION

1. When did you move? Year_____ Month_____

2. How long had you thought about moving before you actually made the move? No. of months_____

3. How long was it between making the decision to move and making the move itself? No. of months_____

4. Was the decision to move made:

   ☐ (a) Prior to retirement. How long?_____

   ☐ (b) After retirement. How long?_____

5. What type of housing was your previous residence?

   ☐ (a) Private rented house
   ☐ (b) Private rented flat
   ☐ (c) Company provided house
   ☐ (d) Company provided flat
   ☐ (e) Own house
   ☐ (f) Own flat
   ☐ (g) Other Specify_____

6. What type and size of property was your previous accommodation sited on?

   ☐ (a) Type_____

   ☐ (b) Size_____

7. What type of accommodation do you live in now?

   ☐ (a) Purchased house
   ☐ (b) Purchased flat
   ☐ (c) Other Specify_____

8. How many moves have you made in the past not including the one to your present residence? No. of moves_____

9. If you have moved before, what is the longest period of time in any one residence? No. of years_____

10. Where did you move from? Name the town or district_____

11. What suburb or town do you live in now?_____

12. How long had you lived in your previous accommodation? No.of years_____

13. Which of the following factors had you heard of or knew something about in this area prior to your move here? (Card 1)

	None	A little	Quite a lot
Availability	____	_____	_____
Quality	____	_____	_____
Type	____	_____	_____
Price	____	_____	_____

14. Compared to your previous accommodation, in what respects, if any, is your present residence:

☐ (a) Better Why?_____
☐ (b) Much the same
☐ (c) Worse Why?_____

15. How does your present residence and property compare in size with your previous one? (Card 2)

	Smaller	Much the same	Bigger
(a) Residence			
(b) Property			

16. Did you have to sell or dispose of any of your furniture or possessions when you shifted?

☐ (a) No
☐ (b) Yes

17. If 'R' said Yes to Q.16;

(a) What was the main reason for having to do so:_____

_____

(b) What were your feelings about having to do this:_____

_____

18. How satisfied are you with each of the following aspects of your accommodation?

As I read through the list indicate for each item whether you are 'very satisfied', 'satisfied', 'average or don't know', 'dissatisfied', 'very dissatisfied' or the item is not applicable. Either give me the number of the rating that best describes your level of satisfaction, or say the rating itself. (Card 3)

	VS	S	DK/A	D	VD	NA
(a) Mortgage repayments						
(b) Amount of arrangement of space						
(c) Quality of the building						
(d) Neighbourhood or suburb						
(e) Access to facilities						
(f) Quality of furnishings						
(g) Section/garden						
(h) Ease of maintenance						
(i) Heating						
(j) Access to residence						

19. How much time had you spent in this area before you moved here? (Card 4)

	None	Some	A lot
(a) Visiting			
(b) Holidaying			
(c) Working			
(d) Previously residing - No. of Years_____			
(e) Other, specify_____			

20. Did you know anyone here before you came to live?

- [ ] (a) No
- [ ] (b) Yes

21. If 'R' answered Yes to the previous question, which in the list below did they include?

- [ ] (a) Friends
- [ ] (b) Acquaintances
- [ ] (c) Workmates
- [ ] (d) Relatives — About how many?_____
- [ ] (e) Others — Who?_____

22. What were the three most important reasons involved in your decision to move? (See Sheet)

Look through the items listed on Sheet 1, and give me the three main reasons in order of their priority. If there were more, let me know what the others were.

- [ ] (a) Finding a dwelling more suitable for current needs.
- [ ] (b) The need for something cheaper to maintain than the previous home.
- [ ] (c) The desire to move away from a deteriorating neighbourhood.
- [ ] (d) The desire to move closer to friends.
- [ ] (e) The desire to move closer to family.
- [ ] (f) Better community facilities.
- [ ] (g) Better climate and topography.
- [ ] (h) The desire to return to an area where you had once lived.
- [ ] (i) The need to move out of what was a company house or flat.
- [ ] (j) Other economic considerations. What?_____
- [ ] (k) Health.
- [ ] (l) The small town atmosphere.
- [ ] (m) Other. Specify_____

23. Who were the people who influenced or participated in your decision to move?

- [ ] (a) Spouse/partner
- [ ] (b) Children
- [ ] (c) Relatives
- [ ] (d) Friends
- [ ] (e) Other Specify_____
- [ ] (f) There was no-one else

24. How have you found getting to meet new people?

- [ ] (a) Very easy
- [ ] (b) Easy
- [ ] (c) Neither easy nor difficult
- [ ] (d) Difficult
- [ ] (e) Very difficult

25. If 'R' answered a, b or c

In what situations or places do they meet new people, i.e. how did they go about it?

_____

_____

_____

26. If 'R' answered d or e for Question 24,
Why have they found it difficult to meet new people?

_____

_____

_____

27. How do you get on with various of your neighbours?

☐ (a) Very well How many?_____
☐ (b) Well How many?_____
☐ (c) Average How many?_____
☐ (d) Poorly How many?_____
☐ (e) Very poorly How many?_____

28. What problems or disappointments have you suffered, or have bothered you as a result of moving?

☐ (a) Loss of social ties.
☐ (b) Characteristics of the present neighbourhood
☐ (c) Disruption of community attachments
☐ (d) Family disruption
☐ (e) Climatic conditions
☐ (f) Loss of contact with a broad age range
☐ (g) The transfer of a family member that was a major reason for your decision to move
☐ (h) Family friction
☐ (i) Loss of a familiar environment
☐ (j) Difficulty in developing new relationships
☐ (k) Disruption of employment of your spouse/partner or family member who moved with you.
☐ (l) Accommodation
☐ (m) Access to and availability of services.
☐ (n) Finance
☐ (o) Health
☐ (p) Other What?_____
☐ (q) No disappointments or problems at all.

29. Is there anything about living here that is quite different to how you thought it would be?

☐ (a) No
☐ (b) Yes Specify_____

30. Compared to where you lived before, are the social, recreational and cultural facilities that you make use of or are a member of:

☐ (a) Better Why_____
☐ (b) Much the same
☐ (c) Worse Why_____
☐ (d) Question not relavent

31. Is there anything else about your accommodation or living here that you would like to say something more about?

_____

_____

32. How well do you think that you have adjusted to living here.

- [ ] (a) Very well
- [ ] (b) Reasonably well
- [ ] (c) Neither well nor poorly, or don't know
- [ ] (d) Reasonably poorly
- [ ] (e) Very poorly

33. Do you feel that you have been accepted into the community?

- [ ] (a) Yes
- [ ] (b) No Why not?_____

34. Overall, are the reasons and/or hopes and expectations for which you moved being realised or turning out as you would wish?

- [ ] (a) Yes
- [ ] (b) No Why not?_____

35. How satisfied are you overall with your present situation?

- [ ] (a) Very satisfied
- [ ] (b) Satisfied
- [ ] (c) Average or don't know
- [ ] (d) Dissatisfied
- [ ] (e) Very dissatisfied

36. Taking everything into consideration, if you were given the opportunity to return to the position you were at before you moved, would you choose to do the same all over again or would you choose to do or go somewhere different?

- [ ] (a) Do the same
- [ ] (b) Do something different. Why and where?_____
- [ ] (c) Don't know

37. Do you anticipate having or wanting to make another move at some stage in the future?

- [ ] (a) No
- [ ] (b) Yes Why?_____
- [ ] (c) Don't know

GENERAL

1. Sex? ☐ Male
   ☐ Female

2. What country were you born in?_____

   If you were not born in this country, how many years have you lived in this country? No. of years_____

3. What age group are you in?

59 years or less	☐
60 - 64 years	☐
65 - 69 years	☐
70 - 74 years	☐
75 - 79 years	☐
80+ years	☐

4. What is your denomination?

   ☐ (a) Presbyterian
   ☐ (b) Anglican
   ☐ (c) Roman Catholic
   ☐ (d) Methodist
   ☐ (e) Other Specify_____
   ☐ (f) None

5. How often do you attend church or religious meetings?

   ☐ More than once a week
   ☐ Once a week
   ☐ A couple of times a month
   ☐ Once a month
   ☐ Less than once a month

6. What is the highest level of education or qualification you have gained?

   ☐ None
   ☐ Primary school (up to Std. 6)
   ☐ Secondary school
   ☐ Technical Institute
   ☐ University
   ☐ Other

7. Work history in the five years prior to retirement.

   ☐ (a) No. of jobs held_____
   ☐ (b) Job title(s)_____
   ☐ (c) Whether R. was working
      ☐ (a) Part-time
      ☐ (b) Full-time
      ☐ (c) Both of the above at some stage during last five years

8. Did you fully retire from your career job and then keep going on working either:

   ☐ (a) At the same job Yes/No
   ☐ (b) At some other job Yes/No

9. Income: What group did you fall into:

- [ ] (a) Prior to retirement
- [ ] (b) After retirement

Before retirement	p.a. $ income before tax	After retirement
☐	less than 4,999	☐
☐	5,000 - 9,999	☐
☐	10,000 - 13,999	☐
☐	14,000 - 19,999	☐
☐	20,000 - 24,999	☐
☐	25,000 - 29,999	☐
☐	30,000 - 39,999	☐
☐	40,000 - 59,999	☐
☐	60,000 & over	☐

10. Indicate from which sources you presently receive income:

- [ ] National superannuation
- [ ] Government superannuation
- [ ] Private superannuation or pension schemes
- [ ] Savings
- [ ] Interests/dividends
- [ ] Rents
- [ ] Insurance annuities
- [ ] Other Specify_____

11. Which situation best describes your current status?

- [ ] Never married
- [ ] Married
- [ ] Living together relationship
- [ ] Separated
- [ ] Marriage ended/divorce
- [ ] Spouse deceased
- [ ] Other Specify_____

12. If R. indicated either married or living together, is their spouse/partner still a member of the work force?

- [ ] Yes
- [ ] No

13. If you answered Yes to Q.12,

What is their occupation?

(a) Job-title_____

(b) Whether they work

- (i) Full-time ☐
- (ii) Part-time ☐
- (iii) Casual ☐
- (iv) Other ☐

14. How many living children do you have?_____

15. Listed below are various people who may be living in your household. Could you please indicate which people usually live with you. Do not include anyone who is just staying with you on a visit.

- ☐ (a) Live alone
- ☐ (b) Spouse/partner
- ☐ (c) Daughters/sons — How many in all?_____
- ☐ (d) Other relatives — How many in all?_____
- ☐ (e) One or more unrelated adults. How many in all?_____
- ☐ (f) Other. Say who and how many in all_____

16. Not including your spouse/partner, of the people who do usually live with you, please indicate the number in each group.

- ☐ Pre-school — How many?_____
- ☐ Primary/intermediate — How many?_____
- ☐ Secondary school — How many?_____
- ☐ University/technical institute student — How many?_____
- ☐ Over 18 yrs old and unemployed — How many?_____
- ☐ None of the above — How many?_____

17. Was your state of health an important factor in your decision to retire?

- ☐ No
- ☐ Yes — In what way?_____

18. How would you rate your health at the present time?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Very poor

19. Has there been any change in your health in the past year?

- ☐ No
- ☐ Yes

20. If you answered Yes to the previous question,

(a) Has your health
- ☐ Improved — How?_____
- ☐ Worsened — How?_____

(b) Do you think the change was in part due to retiring?
- ☐ Yes
- ☐ No

(c) Do you think the change is just due to growing older?
- ☐ Yes
- ☐ No

21. Do you have any particular health problems at the moment?

- ☐ No
- ☐ Yes — What are they?_____

22. If you answered Yes to the previous question,

    Do you think they are due to growing older?

    ☐ No
    ☐ Yes Why?_____
    ☐ Don't know

23. During the past year have you had to change or cut down your activities due to your health?

    ☐ No
    ☐ Yes What?_____

24. Have you been seen by a doctor in the last year?

    ☐ No
    ☐ Yes

25. If you have been seen by a doctor in the last year, which of the following was it for?

    ☐ Check-up
    ☐ Illness
    ☐ Treatment
    ☐ Injury
    ☐ Hospitalisation
    ☐ Other Specify_____

26. How frequently have you experienced or felt the following in the last month?

    As I read through the list tell me if you have felt the item very often, often, sometimes, hardly ever or never. (Card 5)

	Never	Hardly Ever	Some-times	Often	Very often	More than before
(a) Trouble in getting to sleep or staying asleep						
(b) Nervousness, feeling tense or irritable						
(c) Headaches or pains in the head or neck						
(d) Tired or worn out easily						
(e) Upset stomach or indigestion						
(f) Enjoying life in general						
(g) Difficulty in getting up in the morning						
(h) Put out if something unexpected happens						
(i) Bothered by nightmares						
(j) Had trouble remembering things						
(k) Loss of appetite						
(l) Troubled by sweating so that you feel damp and clammy						
(m) Dizziness						
(n) Loneliness						
(o) Enjoyed seeing friends						
(p) Felt mentally exhausted and had difficulty in concentrating and thinking clearly						
(q) Ill health affected the amount of activities you could do						
(r) Worried about things						
(s) Heart beating hard						
(t) Want to be left alone						
(u) Felt really good						
(v) Wished you were younger						

27. Where the R. indicates that he/she felt something 'sometimes', 'often' or 'very often', enquire if it is 'more than before'.

28. For the most part do you feel that you are healthy enough to carry out the things that you would like to do?

☐ Yes
☐ No Why not?_____

29. Taking everything into consideration, how satisfied are you with life?

☐ (a) Very satisfied
☐ (b) Satisfied
☐ (c) Neither satisfied nor dissatisfied
☐ (d) Dissatisfied
☐ (e) Very dissatisfied

30. The events that I am going to read usually require some degree of personal adjustment. Some of these things happen to most people at one time or another, other things happen to only a few people. Which of these have you experienced in the last 12 months? Of the event/s experienced, were their effects negative/bad, positive/good or neutral on you? (Card 6)

	+ve	Neu-tral	-ve
1. Relations with spouse/partner changed			
2. Spouse/partner died			
3. Problems with members of immediate family			
4. New person moved into your household			
5. Person moved out of your household			
6. Someone stayed on after they were expected to leave			
7. Serious family arguments with other than spouse/partner			
8. Change in the number of family gatherings			
9. Son/daughter died			
10. Family member other than spouse/partner died			
11. Problems with relatives			
12. Move to another residence or neighbourhood			
13. Remodelling of home			
14. Accident in which there were no injuries			
15. Accident in which there were injuries			
16. Involvement in law-suit or legal action			
17. Took out a mortgage			
18. Foreclosure of a mortgage or loan			
19. Change in financial situation			
20. Retirement			
21. Change in church, club, neighbourhood or other organisation activities			
22. Took a vacation			
23. Was unable to take a planned vacation			
24. Took up a new hobby, sport, craft or recreational activity			
25. Dropped a hobby, sport, craft or recreational activity			
26. Made new friends			
27. Loss of friend/s for reasons other than death			
28. Change in relation with friends/neighbours			
29. Close friend died			
30. Change in your status or autonomy			

31. Revision of personal habits
32. Change in your health due to illness or injury
33. Change in the health of a family member
34. Unable to get treatment for an illness or injury
35. Loss of drivers licence
36. Other Specify_____

31. Now I would like to get an idea of the people who are important to you in a number of different ways. I will be reading descriptions of ways people are often important to us. After I read each description I will be asking you to give me the first names, initials, or nicknames of the people who fit the description. These people might be friends, family members, neighbours, ministers, doctors, or other people you might know.

    I will only want you to give me the names of people you actually know and that you have actually talked to during the last month. It's possible then that you won't get a chance to name some important people if for one reason or another you haven't had any contact with them in the last month.

    If you have any questions about the descriptions after I read each one, please ask me to try and make it clearer.

    A. Private Feelings

    If you wanted to talk to someone about things that are very personal and private, who would you talk to? Give me the first names, initials, or nicknames of the people that you would talk to about things that are very personal and private.

    During the last month, which of these people did you actually talk to about things that are personal and private?

    B. Material Aid

    Who are the people you know that would lend or give you money if you needed it, or lend or give you something (a physical object) that was valuable. You can name some of the people that you named before if you think that they fit this description too, or you can think of some other people.

    During the past month which of these people loaned or gave you some money or loaned or gave you some valuable object that you needed?

    C. Advice

    Who would you go to if a situation came up when you needed some advice? Remember, you can name some of the people that you mentioned before, or you can name some new people.

    During the last month which of these people actually gave you some important advice.

D. Positive Feedback

Who are the people that you could expect to let you know when they like your ideas or the things that you do? These might be people that you mentioned before or new people.

During the past month, which of these people actually let you know that they liked your ideas or liked the things that you did?

E. Physical Assistance

Who are the people that you could call on to give up some of their time and energy to help you to take care of something that you needed to do - things like driving you some place that you needed to go, helping you to do some work around the house, going to the shops for you, and things like that? Remember, you might have mentioned these people before or they could be new names.

During the last month, which of these people actually pitched in to help you do the things that you needed some help with?

F. Social Participation

Who are the people that you could get together with to have fun or to relax? These could be new names or ones you have listed before.

During the last month, which of these people did you actually get together with to have fun or to relax?

G. Negative Interactions

Who are the people that you can expect to have some unpleasant disagreement with or people that you can expect to make you angry or upset? These could be new names or names that you have said before.

During the last month, which of these people have you actually had some unpleasant disagreements with or have actually made you angry and upset?

32. How much planning did you do for your retirement?

☐ (a) None

☐ (b) Some

☐ (c) A lot

33. If you have been given the choice when you retired, would you have preferred to keep on working in your job, or were you quite happy to have finished when you did?

☐ (a) If I had the choice, I would have preferred to have kept on working.

☐ (b) My decision to retire was entirely my own - there was no mandatory retirement age or requirement.

☐ (c) Although there was a mandatory retirement age or requirement I was quite happy to retire when I did.

34. Further Comments.

Response Cards: Cards 1,2,3,4,5 and 6 were set up in a 'flip chart' manner. Because of its size, the items to Q.22 were presented on a single, separate sheet.

Relocation

Q.13 Card 1
1. Nothing
2. A little
3. Quite a lot

Q.15 Card 2
1. Smaller
2. Much the same
3. Bigger

Q.18 Card 3
1. Very satisfied
2. Satisfied
3. Average or Don't know
4. Dissatisfied
5. Very dissatisfied
6. Not applicable

Q.19 Card 4
1. None
2. Some
3. A lot

Q.22
1. Finding a dwelling more suitable for current needs.
2. The need for something cheaper to maintain than the previous home.
3. The desire to move away from a deteriorating neighbourhood.
4. The desire to move closer to friends.
5. The desire to move closer to family.
6. Better community facilities.
7. Better climate and topography.
8. The desire to return to an area where you had once lived.
9. The need to move out of what was a company house or flat.
10. Other economic considerations.
11. Health.
12. The small town atmosphere
13. Other. Specify.

Q.26 Card 5
1. Very often
2. Often
3. Sometimes
4. Hardly ever
5. Never

Q.30 Card 6
1. Unwanted, undesirable or negative effects.
2. Natural, little or no effects.
3. Beneficial, desirable or positive effects.

APPENDIX 2C

RETIREMENT AND RELOCATION

The purpose of this questionnaire is to find out a number of things: the reasons people decide to relocate, how satisfied they are with various aspects of their new environment, whether there were, or are, any problems in adjusting to their environment, and the relationship between supportive social contacts and the events and experiences that you have had.

This is not a test, your identity will remain anonymous and the information you give will be kept strictly confidential.

Although I will be reading you most of the questions and possible answers, to make things easier for you to understand, a number of the questions and answer categories have been put onto cards. When it is appropriate, I will refer you to a card and tell you what to do. Try to answer questions as accurately as possible - if you are not sure, guess.

Thank you for your co-operation.

Researcher: Susan Walker

Department of Psychology

University of Canterbury

APPENDIX 2C (Contd.)

RETIREMENT AND RELOCATION

I am conducting a study which is looking at the relocation of people after they have retired. Although you have not moved after your retirement, it is desirable to be able to compare people who have not moved with those who have, so your participation in this project is just as valuable as the participation of those retired people who have relocated. The purpose of this particular questionnaire is just to find out about life in general.

This is not a test, your identity will remain anonymous and the information you give will be kept strictly confidential.

Although I will be reading you most of the questions and possible answers, to make things easier for you to understand, a number of the questions and answer categories have been put onto cards. When it is appropriate, I will refer you to a card and tell you what to do. Try to answer the questions as accurately as possible - if you are not sure, guess.

Thank you for your co-operation.

Researcher: Susan Walker

Department of Psychology
University of Canterbury

APPENDIX 2D

LIFE-EVENT ITEM SOURCES

Event Number	Source	Original Q. No.	Changes Made
1	PERI[1]	32/35	Was 2 sep. Qs. - positive/negative
2	PERI	39	Added partner
3	NAI[2]	53(d)	
4	PERI	49	Changed 'the' to 'your'
5	PERI	50	Changed 'the' to 'your'
6	PERI	51	Deleted 'in the household'. Changed 'he' to 'they'
7	PERI	52	Reworded
8	PERI	53	Reworded
9	PERI	46	Changed 'child' to 'son/daughter'
10	Original		
11	WAI	53(e)	
12	PERI	55/56/57	Was 3 sep.Qs - positive/negative/actual
13	PERI	60	
14	PERI	64	
15	Original		
16	PERI	65	Added 'or legal action'
17	PERI	75	
18	PERI	77	
19	H&R[3]	16	Changed 'state' to 'situation'
20	H&R	10	
21	PERI	86	Deleted 'synagogue'
22	PERI	87	
23	PERI	88	Changed 'not able' to 'unable'
24	PERI	89	
25	PERI	90	
26	PERI	93	
27	Original		
28	Original		
29	PERI	95	
30	Original		
31	H&R	29	
32	H&R	6	Reworded
33	H&R	11	
34	PERI	102	
35	Original		
36			

1. PERI: Psychiatric Epidemiology Research Interview. B.S.Dohrenwend et.al., 1978.
2. WAI: Mobile Workforce Project Interview Schedule. G. Higgs, et.al., 1983.
3. H&R: Social Readjustment Rating Schedule. Holmes and Rane, 1967.

APPENDIX 2E

SYMPTOMS LIST SOURCES

Mobile Workforce Study Response Categories
(Never/Hardly Ever/Sometimes/Often/Very Often) used.

Symptom	Source
a	G[1]
b	G
c	G
d	G
e	G
f	W[2]
g	G
h	G
i	G
j	W
k	G
l	G
m	G
n	W
o	W
p	G
q	G
r	W
s	G
t	G
u	W
v	Original

1. General (Physical) Health Questionnaire, Marshall, J. and Cooper, G., 1979.

2. Mobile Workforce Project Interview Schedule, G. Higgs, et.al., 1983.

APPENDIX 2F

THE INVENTORY OF SOCIALLY SUPPORTIVE BEHAVIOURS (ISSB)

Below is a list of items that relate to types of support. Please read each one carefully and then select the rating that you think most accurately describes how often other people did the activities for you, to you, or with you during the past 4 weeks.

	Not at all	Once or twice a month	About once a week	Several times a week	About every day
1. Looked after a family member while you were away					
2. Was right there physically in a stressful situation.					
3. Provided you with a place where you could get away for a while.					
4. Watched after your possessions when you were away (pets, plants, home etc.)					
5. Told you what he/she did in a situation that was similar to yours.					
6. Did some activity with you to help you get your mind off things.					
7. Talked with you about some interests of yours.					
8. Let you know that you did something well.					
9. Went with you to someone who could take action.					
10. Told you that you were O.K. just the way you are.					
11. Told you that he/she would keep the things that you talk about private - just between the two of you.					
12. Assisted you in setting a goal for yourself.					
13. Made it clear what was expected of you.					

14. Expressed esteem or respect for a competency or personal quality of yours.

15. Gave you some information on how to do something.

16. Suggested some action that you should take.

17. Gave you some money.

18. Comforted you by showing some physical affection.

19. Gave you some information to help you understand a situation you were in.

20. Provided you with some transportation.

21. Checked back with you to see if you followed the advice you were given.

22. Helped you understand why you didn't do something well.

23. Listened to you talk about your private feelings.

24. Loaned or gave you something that you needed (a physical object other than money).

25. Agreed that what you wanted to do was right.

26. Said things that made your situation clearer and easier to understand.

27. Told you how he/she felt in a situation that was similar to yours.

28. Let you know that she/he will always be around if you need assistance.

29. Expressed interest and concern in your well-being.

30. Told you that he/she feels very close to you.

31. Told you who you should see for assistance.

32. Told you what to expect in a situation that was about to happen.

33. Loaned you some money.

34. Taught you how to do something.

35. Gave you feed-back on how you were doing without saying it was good or bad.

36. Joked and kidded to try and cheer you up.

37. Provided you with a place to stay.

38. Pitched in to help you do something that needed to get done.

LETTER SUMMARISING RESULTS APPENDIX 2G

186 Huatoki Street,
NEW PLYMOUTH
July, 1986

Dear

At long last, I have prepared a summary of major findings from the study of relocation and the retired in which you participated in late 1984. During February of this year I managed to contact, or trace, nearly three-quarters of you in a brief follow-up exercise. I was surprised and delighted to discover that nearly all the participants expressed some recollection of the interview conducted two years before.

To refresh your memories, a major purpose of the project was to investigate a variety of factors associated with the relocation of the retired. These included reasons involved in the decision to move, satisfaction with the new environment, problems and disappointments and adjustment. A large volume of literature suggests relocation is a stressful experience, the effects of which are evident for some time after the event. A secondary aim was, therefore, to determine whether people who relocated differed from non-relocated people on stress-related factors (e.g. physical health symptoms, social support) and other key variables.

At the end of two months of interviewing, my final sample consisted of 42 relocatees and 36 non-relocatees, 61 of whom were men and 17 of whom were women; a total of 78 participants. When reading these results please remember that they only reflect trends - there is often considerable variation in the individual answers.

For those participants who relocated, the most important reasons for doing so involved (in order of importance) the climate and topography, a desire to move closer to family, the desire to find something more suitable to meet current needs, and health. Everyone was, overall, either satisfied or very satisfied with various aspects of their accommodation, although a number did experience the odd disappointment or problem. The major disappointments and problems of a more general nature included a loss of social ties and loss of a familiar environment. Fifteen people reported experiencing no problems at all. Well over 75 per cent of participants reported they had adjusted either well or very well to their new environment, felt they had been accepted into the community, and were satisfied or very satisfied with their situation. It was interesting to note, however, that approximately 36 per cent of respondents were either quite sure or possibly considering moving again at some stage in the future.

Comparisons between the relocated and non-relocated individuals on a variety of factors resulted in an apparent lack of difference between the two groups. The only significant differences that did occur were on education, and the role of health in the retirement decision. A greater number of relocated participants had received a tertiary education, and they had also reported that health was an important factor in their decision to retire.

There was, in fact, more variation within the groups as a whole.

Higher levels of physical symptoms were related to the experiencing of a greater number of negative life events, and not feeling healthy enough to do what one wants. Higher levels of social support were associated with the experiencing of a greater number of neutral life events, and being married (as opposed to widowed or single).

The final result indicates that you are more similar than dissimilar on the range of variables studied, and that, for the most part, you are quite satisfied and content with your lifestyle. I do hope this "average result" is close to reality. Thank you all very much for your time, I know how busy many of you were. If you should like any more information, I can be contacted through the above address.

Yours sincerely,

S.W. Walker

Susan W. Walker

APPENDIX 3A

LIFE EVENTS EXPERIENCED OVER THE LAST 12 MONTHS

	Positive (f)	Neutral (f)	Negative (f)
Relationship with spouse/partner changed		1	1
Spouse/partner died			1
Problems with members of immediate family		6	7
New person moved into your household		1	1
Person moved out of your household	1		1
Someone stayed on after you expected them to leave		1	
Serious family arguments with other than spouse/partner			1
Change in number of family gatherings	15	2	4
Son/daughter died		2	1
Family members other than spouse/partner died		4	9
Problems with relatives		2	2
Move to another residence or neighbourhood	10	2	
Remodelling of home	22	4	1
Accident in which there were no injuries		1	1
Accident in which there were injuries			9
Involvement in law-suit or legal action			1
Took out a mortgage			1
Foreclosure of a mortgage or loan			
Change in financial situation	8	3	4
Retirement	1		
Change in church, club, neighbourhood or other organisation activities	9	8	1
Took a vacation	53	2	1
Unable to take a planned vacation		4	8
Took up a new hobby, sport, craft or recreational activity	7	7	
Dropped a hobby, sport, craft or recreational activity		4	3
Made new friends	14	5	
Loss of friend/s for reasons other than death		5	6
Change in relation with friends/neighbours	3		
Close friend died		15	18
Change in your status or autonomy		2	
Revision of personal habits	7	6	5
Change in health due to illness/injury	2	3	14

Change in health of a family member	3	6	10
Unable to get treatment for an illness or injury		1	2
Loss of drivers licence		1	
Other	1	3	2
Total	156	101	113